



# SERVICE MANUAL

DIGITAL VOICE REPEATER  
**ID-RP4000V**

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S-14309XZ-C1  
Dec. 2006

## INTRODUCTION

This service manual describes the latest service information for the **ID-RP4000V** DIGITAL VOICE REPEATER at the time of publication.

To upgrade quality, any electrical or mechanical parts and internal circuits are subject to change without notice or obligation.

## CAUTION

**NEVER** connect the transceiver to an AC outlet or to a DC power supply that uses more than 15 V. This will ruin the transceiver.

**DO NOT** reverse the polarities of the power supply when connecting the transceiver.

**DO NOT** apply an RF signal of more than 20 dBm (100 mW) to the antenna connector. This could damage the transceiver's front end.



## ORDERING PARTS

Be sure to include the following four points when ordering replacement parts:

1. 10-digit order numbers
2. Component part number and name
3. Equipment model name and unit name
4. Quantity required

### <SAMPLE ORDER>

1110003491 S.IC TA31136FNG ID-RP4000V MAIN UNIT 5 pieces  
8820001210 Screw 2438 screw ID-RP4000V Top cover 10 pieces  
Addresses are provided on the inside back cover for your convenience.

## REPAIR NOTES

1. Make sure a problem is internal before disassembling the transceiver.
2. **DO NOT** open the transceiver until the transceiver is disconnected from its power source.
3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
5. **DO NOT** keep power ON for a long time when the transceiver is defective.
6. **DO NOT** transmit power into a signal generator or a sweep generator.
7. **ALWAYS** connect a 50 dB to 60 dB attenuator between the transceiver and a deviation meter or spectrum analyzer when using such test equipment.
8. **READ** the instructions of test equipment thoroughly before connecting equipment to the transceiver.

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# SECTION 1      SPECIFICATIONS

## ■ GENERAL

• Operating frequency range	: Transmit      440–450 MHz
• Type of emission	: Receive      440–450 MHz
	: F1D* (GMSK)
	*F7W for system operation
• Transfer rate	: 4.8 kbps
• Frequency resolutions	: 5, 6.25 kHz
• Frequency stability	: $\pm 0.8$ kHz (based on 25°C)
• Usable temperature range	: –10°C to +50°C; +14°F to +122°F
• Antenna connectors	: Type-N (50 Ω)×2
• Power supply requirement	: 13.8 V DC $\pm 15\%$ (Negative ground)
• Current drain	: Transmit (High)      Less than 7.0 A (Low)      Less than 3.0 A
	: Receive (Stand-by)      Less than 0.7 A
• Dimensions (proj. not included)	: 483(W)×88(H)×428(D) mm; 19(W)×3 $\frac{15}{32}$ (H)×16 $\frac{27}{32}$ (D) in
• Weight (Approx.)	: 7.5 kg; 16 lb 9 oz

## ■ TRANSMITTER

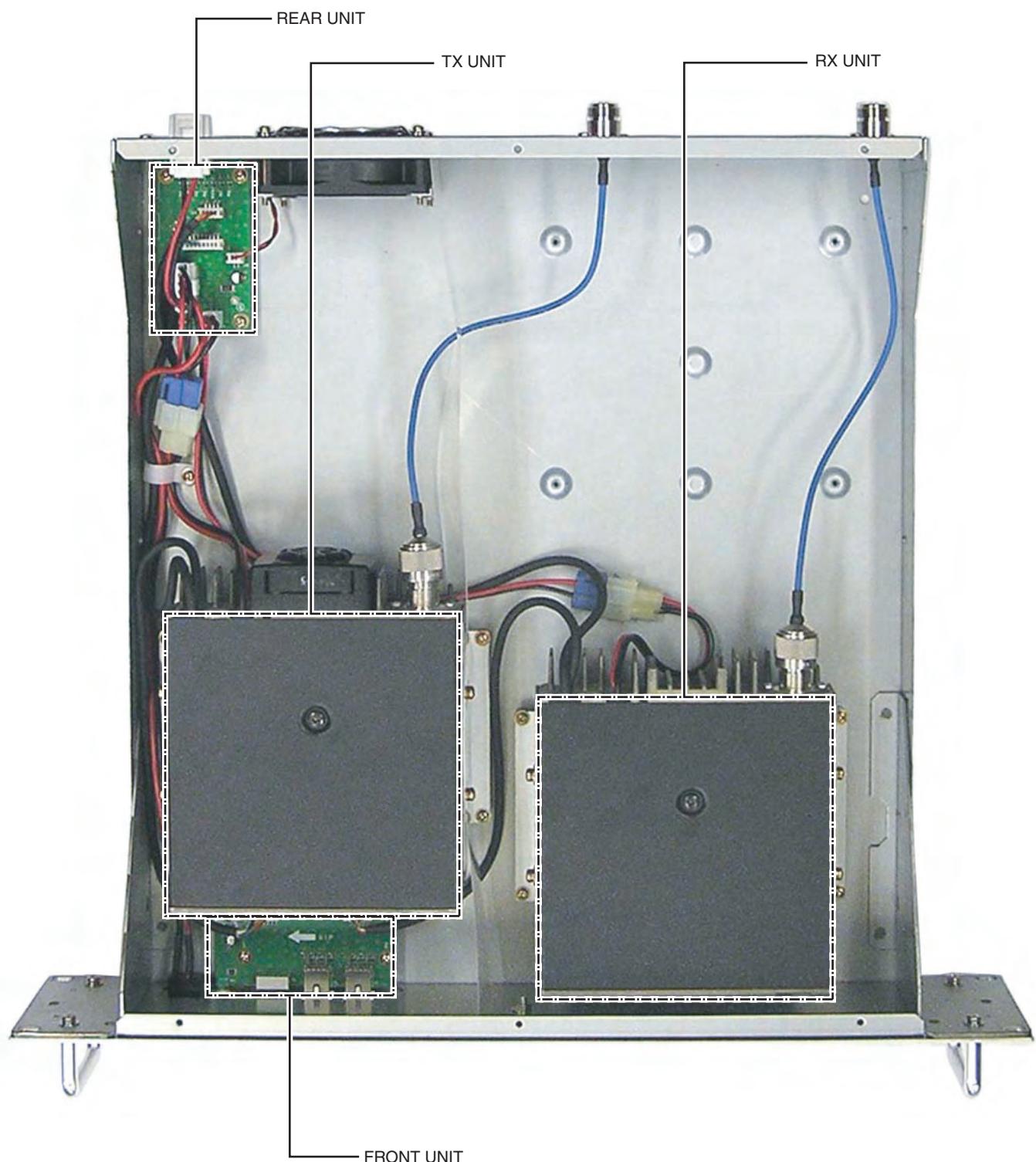
• Output power (at 13.8 V DC)	: High      23–30 W
	: Low      2.0–3.0 W
• Modulation	: GMSK
• Modulation system	: Quadrature modulation (244.8 MHz)
• Occupied bandwidth	: Less than 5.5 kHz
• Spurious emissions	: Less than –60 dB

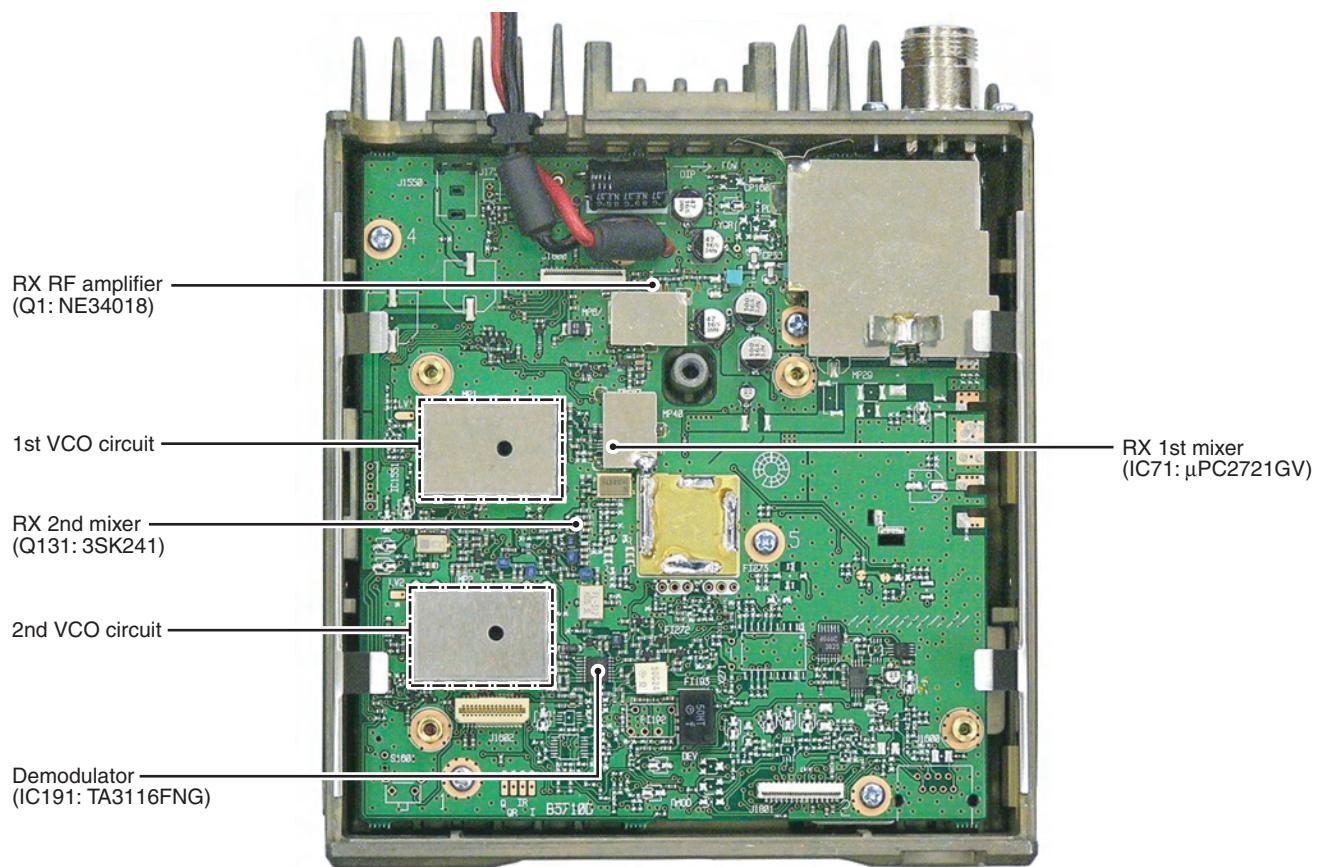
## ■ RECEIVER

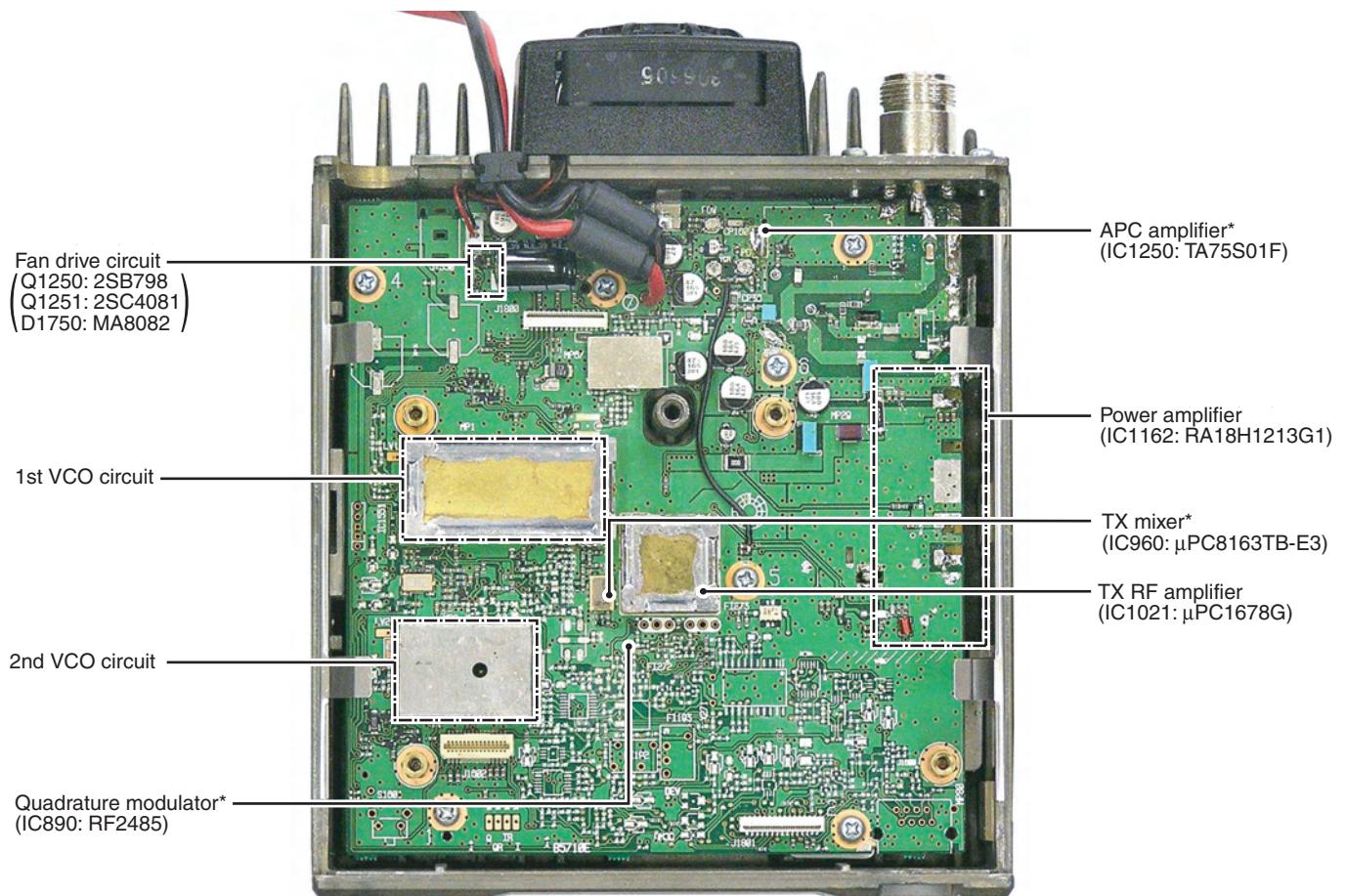
• Receive system	: Double-conversion superheterodyne system
• Intermediate frequencies	: 1st      70.0 MHz
	: 2nd      450 kHz
• Sensitivity (BER $1 \times 10^{-2}$ )	: Less than –7 dB $\mu$ (0.45 μV)
• Selectivity (20 kHz offset)	: More than 65 dB
• Spurious and image rejection	: More than 70 dB
• Receive spurious	: Less than 2 nW (–57 dBm)

All stated specifications are subject to change without notice or obligation.

## SECTION 2     INSIDE VIEWS



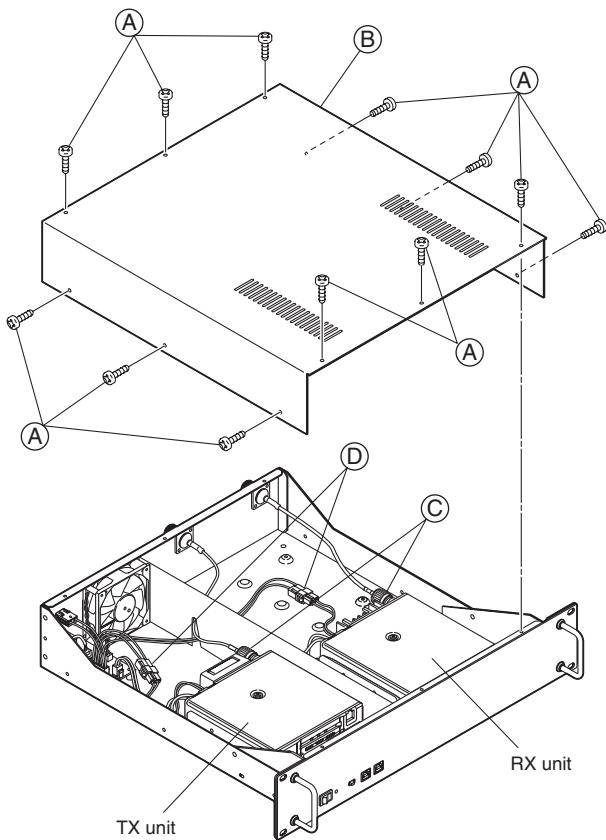




## SECTION 3 DISASSEMBLY INSTRUCTION

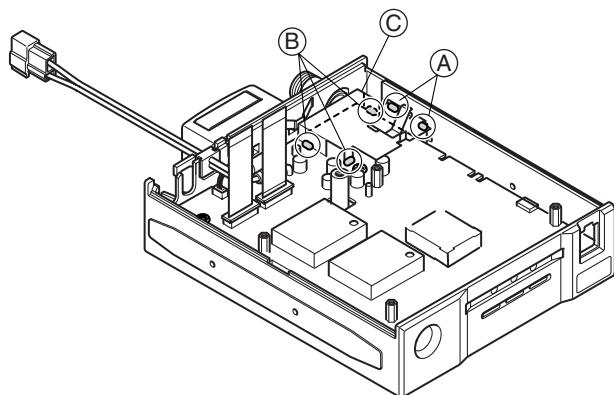
### • REMOVING THE COVER

- ① Unscrew 12 screws **A**, and remove the cover **B**.
- ② Disconnect 2 cables **C**, and disconnect 2 cables **D**.



### • REMOVING THE MAIN-T/R UNIT

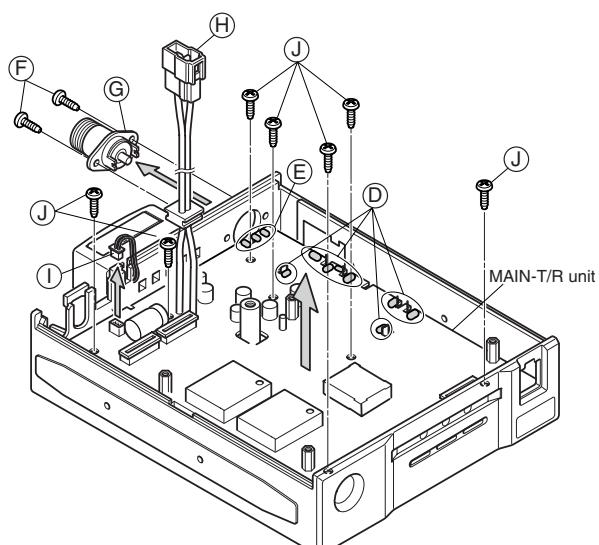
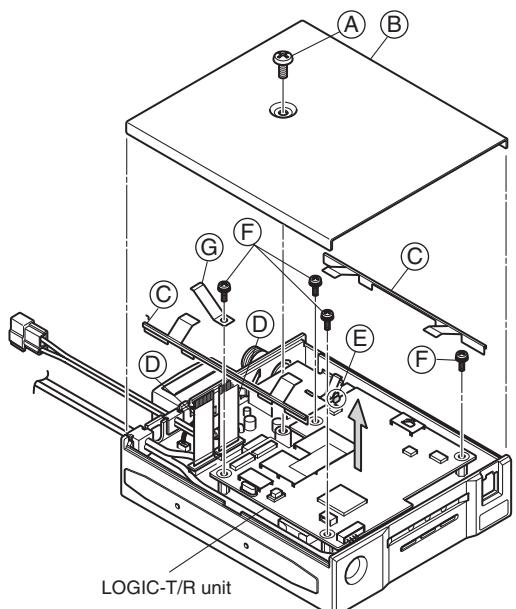
- ① Unsolder 2 points **A**. (MAIN-T unit only)
- ② Unsolder 3 points **B**, and remove the ANT plate **C**.



- ③ Unsolder 8 points **D**. (MAIN-T unit only)
- ④ Unsolder 3 points **E**.
- ⑤ Unscrew 2 screws **F**, and remove the ANT connector **G**.
- ⑥ Take off the cable **H** from the chassis.
- ⑦ Disconnect the cable **I**. (MAIN-T unit only)
- ⑧ Unscrew 7 screws **J**, and take off the MAIN-T/R unit.

### • REMOVING THE LOGIC-T/R UNIT

- ① Unscrew 1 screw **A**, and remove the cover **B**.
- ② Remove 2 main shield plates **C**.
- ③ Disconnect 2 cables **D**, and unsolder 1 point **E**.
- ④ Unscrew 4 screws **F**, and remove the earth spring **G**.
- ⑤ Take off the LOGIC-T/R unit.



# SECTION 4 PARTS LIST

## [LOGIC-R UNIT]

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
IC5	1180002391	S.REG S-812C33AMC-C2N-G	T	49.9/4.1
IC6	1180001071	S.I.C TA7805F (TE16L,Q)	T	27.5/9.8
IC7	1110005440	S.I.C NJM2374AM-TE1	T	4.7/13.3
IC9	1130010630	S.I.C SN74AHCT541PWR	T	96.4/30.8
IC10	1130007301	S.I.C TC4W66FU (TE12L,F)	B	19/21.5
IC11	1180002391	S.REG S-812C33AMC-C2N-G	T	19.1/18
IC12	1190001340	S.I.C M62334FP 600C	T	49.2/57
IC13	1130006891	S.I.C TC7S04FU (TE85R,F)	T	29.7/26
IC14	1110005430	S.I.C CMX589AD5	T	19.4/29.5
IC15	1110002861	S.I.C TA75S393F (TE85R,F)	B	08.5/40.1
IC16	1130007111	S.I.C TC7W04FU (TE12L,F)	B	68.8/29
IC17	1140008650	S.I.C HN58X2464TI	T	4.6/25.8
IC18	1130008361	S.I.C TC7SHU04FU (TE85L,JF)	T	7.2/45.6
IC19	1130008361	S.I.C TC7SHU04FU (TE85L,JF)	B	10.4/47.3
IC20	1190001340	S.I.C M62334FP 600C	T	49.2/44.2
IC21	1120002870	S.I.C XCS20XL-4TQ144I	T	27.3/51.6
IC22	1130007281	S.I.C TC7S32FV (TE85R,F)	B	68.9/41.2
IC23	1110005731	S.I.C S-80928CNMC-G8Y-G	B	90/51.6
IC24	1130008361	S.I.C TC7SHU04FU (TE85L,JF)	T	7/58.3
IC25	1130008361	S.I.C TC7SHU04FU (TE85L,JF)	B	8/60.2
IC26	1140001091	S.I.C PD70F3102AGJ-33-8EU-A	T	73.5/48.6
IC27	1130007281	S.I.C TC7S32FV (TE85R,F)	B	54.1/27.3
IC28	1130012051	S.I.C FT232BL	T	53.8/24.4
IC29	1130009570	S.I.C BR93LC46F-WE2	T	66.8/23
IC33	1120002960	S.I.C TC74AC541FT (EL)	T	76.8/73
IC36	1120002830	S.I.C NJM2125F-TE1	T	65.5/73.2
Q1	1590000430	S.TR DTC144EUA T106	T	39.1/16.4
Q2	1520000201	S.TR 2SB798-T2-AZ DK	T	34.5/20.2
Q4	1590001400	S.TR XP1214 (TX)	B	20.7/24.6
Q5	1590001400	S.TR XP1214 (TX)	B	27.2/23
Q6	1590003500	S.TR DTC114YE TL	B	45.2/9.2
Q7	1590000430	S.TR DTC144EUA T106	B	20.9/34
Q8	1530002280	S.TR 2SC4081 T106 S	T	46/7.5
Q9	1520000201	S.TR 2SB798-T2-AZ DK	B	71.3/14.5
Q10	1590000430	S.TR DTC144EUA T106	T	34/32
Q11	1590000430	S.TR DTC144EUA T106	B	11.2/35.7
Q12	1590000440	S.TR DTA143ZUA T106	B	93.7/38.5
Q13	1590003500	S.TR DTC114YE TL	B	06.2/35.5
Q14	1590000430	S.TR DTC144EUA T106	B	58/22.5
D2	1790000671	S.DIO SB07-03C-TB-E	T	10.8/6.9
D3	1750000550	S.DIO 1SS355 TE-17	T	43.4/9.4
D4	1790000671	S.DIO SB07-03C-TB-E	T	15.7/17.6
D5	1790000671	S.DIO SB07-03C-TB-E	T	41.9/13.3
D6	1750000550	S.DIO 1SS355 TE-17	B	11.4/40.1
D7	1730002280	S.ZEN MA8091-M (TX)	B	110.1/47
D8	1730002280	S.ZEN MA8091-M (TX)	T	110.8/36.1
D9	1750000841	S.VCP 1SV324 (TPH3,F)	T	8.9/42
D11	1750000550	S.DIO 1SS355 TE-17	B	01.8/40.6
D12	1750000550	S.DIO 1SS355 TE-17	B	97.9/42.4
D13	1750000550	S.DIO 1SS355 TE-17	B	97.9/40.6
D15	1750000841	S.VCP 1SV324 (TPH3,F)	T	9.1/61.6
D16	1790001240	S.DIO MA2S728-(TX)	T	59.1/44.3
D17	1790001240	S.DIO MA2S728-(TX)	T	58.9/46.8
X1	6050011240	S.XTL CR-708 (16.384 MHz)	T	3.7/45.9
X2	6050011290	S.XTL CR-715 (6 MHz)	T	79.8/30.1
X3	6050011700	S.XTL CR-760 (9.8304 MHz)	T	3.7/58.4
X4	6050011290	S.XTL CR-715 (6 MHz)	T	43.5/25.1
L1	6200003590	S.COL EXCCL3225U1	B	92.1/13
L2	6200003590	S.COL EXCCL3225U1	B	05.7/10.3
L3	6200003590	S.COL EXCCL3225U1	T	3.7/22.4
L4	6190001561	S.COL CDRH5D18NP-101NC	T	10.7/18.5
L5	6190001561	S.COL CDRH5D18NP-101NC	T	10.7/11.5
L6	6200002041	S.COL NLV25T-101J	B	16.6/34.4
L7	6200005741	S.COL ELJRE 47NGFA	B	3.6/31.7
L8	6200005741	S.COL ELJRE 47NGFA	B	69.7/34.8
L9	6200005741	S.COL ELJRE 47NGFA	B	105.5/44
L10	6200005741	S.COL ELJRE 47NGFA	B	69.7/36.9
L11	6200005741	S.COL ELJRE 47NGFA	B	55.7/37.5
L12	6200006991	S.COL ELJRE 56NGFA	B	52.6/23.2
L15	6200002041	S.COL NLV25T-101J	T	61.4/25.4
L16	6200005741	S.COL ELJRE 47NGFA	T	61.5/23.5
R1	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	91.2/16.2
R3	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	96.8/13.7
R4	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	98.3/13.7
R5	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	99.8/13.7

## [LOGIC-R UNIT]

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
R7	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	02.8/13.7
R8	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	04.3/13.7
R10	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	07.3/13.7
R13	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	09.1/13.7
R14	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	80/13.7
R15	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	81.3/13.7
R16	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	82.6/13.7
R17	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	84/13.7
R21	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	86.2/17.5
R22	7030003590	S.RES ERJ3GEYJ 183 V (18 k)	T	87.9/21
R23	7030003590	S.RES ERJ3GEYJ 183 V (18 k)	T	88.2/21
R29	7030004020	S.RES MCR10EZHZJ 2.2 k	T	36.6/13.8
R30	7030004020	S.RES MCR10EZHZJ 2.2 k	T	36.6/11.9
R31	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	34.5/16.3
R32	703000180	S.RES MCR10EZHZJ 22 (220)	T	33.2/13.8
R33	703000180	S.RES MCR10EZHZJ 22 (220)	T	33.2/11.9
R34	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	94.3/18.4
R38	7030003510	S.RES ERJ3GEYJ 392 V (3.9 k)	B	108/17.2
R40	7030003470	S.RES ERJ3GEYJ 182 V (1.8 k)	T	83.4/15.9
R41	7030003590	S.RES ERJ3GEYJ 183 V (18 k)	B	86.5/14.5
R51	7030003600	S.RES ERJ3GEYJ 223 V (22 k)	T	5.3/18.9
R52	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)	T	4/18.9
R53	7030000020	S.RES MCR10EZHZJ 1 (010)	B	4.3/10
R60	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	T	6.6/18.9
R61	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	48/9.7
R62	7030003470	S.RES ERJ3GEYJ 182 V (1.8 k)	B	43.2/8.2
R63	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	29.7/23.8
R64	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	19.1/31.7
R65	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	19.1/30.5
R66	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	19.1/29.3
R67	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	19.1/28.1
R68	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	19.1/26.9
R69	7030003800	S.RES ERJ3GEYJ 105 V (1 M)	T	25.4/25.1
R70	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	T	32/27.2
R71	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	T	31.4/29.6
R72	7030003750	S.RES ERJ3GEYJ 394 V (390 k)	B	17.1/25.6
R73	7030009340	S.RES ERJ3GEYJ 275V (2.7 M)	B	13.8/22.7
R90	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	T	45.2/10.7
R91	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	B	109.8/44
R94	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	T	14.2/23.3
R115	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	B	04.6/37.6
R116	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	B	104.6/39
R117	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)	B	08.1/37.5
R126	7030003600	S.RES ERJ3GEYJ 223 V (22 k)	B	09.2/34.5
R127	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	B	94.5/36.2
R128	7030003490	S.RES ERJ3GEYJ 272 V (2.7 k)	B	04.5/34.2
R129	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	B	05.5/45.5
R130	7030003370	S.RES ERJ3GEYJ 271 V (270 )	T	7.2/50.1
R131	7030003800	S.RES ERJ3GEYJ 105 V (1 M)	T	7.2/48.7
R132	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	10.5/40.8
R133	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	22.3/37.6
R134	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	66.3/41.2
R135	7030003570	S.RES ERJ3GEYJ 123 V (12 k)	B	02.4/38.3
R136	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	09.0/38.3
R137	7030003570	S.RES ERJ3GEYJ 123 V (12 k)	T	9.5/25.9
R138	7030003570	S.RES ERJ3GEYJ 123 V (12 k)	T	5.2/28.9
R139	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	B	90.7/48.2
R140	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	9.1/49.4
R141	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	9.1/45.4
R142	7030003320	S.RES ERJ3GEYJ 101 V (100 )	B	13.2/44
R143	7030003320	S.RES ERJ3GEYJ 101 V (100 )	B	10.4/42.5
R145	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	B	66.2/35.5
R146	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	66.2/34
R148	7030003860	S.RES ERJ3GE JPW V	T	68.5/30.1
R149	7030003340	S.RES ERJ3GEYJ 151 V (150 )	B	72.8/36.9
R150	7030003360	S.RES ERJ3GEYJ 221 V (220 )	B	92.2/48.2
R151	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	9.1/54.4
R152	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	9.1/58.4
R153	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	T	40.5/51.2
R154	7030003860	S.RES ERJ3GE JPW V	T	57/40.9
R155	7030003800	S.RES ERJ3GEYJ 105 V (1 M)	T	7/60.7
R156	7030003400	S.RES ERJ3GEYJ 471 V (470 )	T	7/62.2
R157	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	8.4/63.9
R158	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	T	40.8/59.3
R159	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	B	62.3/47
R160	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	62.5/49.3
R161	7030003510	S.RES ERJ3GEYJ 392 V (3.9 k)	B	90/43.8
R162	7030003320	S.RES ERJ3GEYJ 101 V (100 )	B	8.2/56.5
R163	7030003320	S.RES ERJ3GEYJ 101 V (100 )	B	11.7/61.2
R164	7030003860	S.RES ERJ3GE JPW V	T	37.7/63.5
R165	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	T	39.3/62.6
R167	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	58.8/57.3
R168	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	54.5/57.8
R169	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	54.5/56.4
R170	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	54.5/44.7

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)

S.=Surface mount

for free by

RadioAmateur.eu

**[LOGIC-R UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
R171	7030003200	S.RES ERJ3GEYJ 101 V (100 )	T	54.5/43.5
R172	7030003340	S.RES ERJ3GEYJ 151 V (150 )	B	56.5/25.9
R173	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	54/25.3
R174	7030003580	S.RES ERJ3GEYJ 153 V (15 k)	B	51/26.5
R175	7030003550	S.RES ERJ3GEYJ 822 V (8.2 k)	B	51/28
R176	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)	T	53.3/18
R177	7030003400	S.RES ERJ3GEYJ 471 V (470 )	B	55.5/23.2
R178	7030003860	S.RES ERJ3GE JPW V	B	52/21
R179	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	66.3/23.5
R180	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	69/23.5
R183	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	B	55.8/31.5
R184	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)	T	57.5/16.1
R185	7030003200	S.RES ERJ3GEYJ 100 V (10 )	T	57.5/18.6
R186	7030003200	S.RES ERJ3GEYJ 100 V (10 )	T	57.5/17.4
R187	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	68.2/73
R188	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	28.5/35.7
R190	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	64.5/76
R192	7030003860	S.RES ERJ3GE JPW V	T	65.8/30.1
R194	7030003860	S.RES ERJ3GE JPW V	T	68.5/32.9
R195	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	B	51/32.2
R196	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	52.4/32.9

C1	4030006860	S.CER C1608 JB 1H 102K-T	B	91.2/17.5
C3	4030006860	S.CER C1608 JB 1H 102K-T	B	99.1/18.4
C4	4030011600	S.CER C1608 JB 1E 104K-T	B	99.1/20.2
C5	4030011600	S.CER C1608 JB 1E 104K-T	T	90.9/14.3
C6	4030007090	S.CER C1608 CH 1H 470J-T	T	109.1/17.5
C13	4030006900	S.CER C1608 JB 1H 103K-T	B	94.3/19.7
C15	4030006860	S.CER C1608 JB 1H 102K-T	B	06.6/12.5
C16	4030007130	S.CER C1608 CH 1H 101J-T	B	06.6/13.8
C19	4030007090	S.CER C1608 CH 1H 470J-T	T	07.3/17.5
C21	4030007090	S.CER C1608 CH 1H 470J-T	T	04.3/17.5
C22	4030006850	S.CER C1608 JB 1H 471K-T	T	02.8/17.5
C24	4030007090	S.CER C1608 CH 1H 470J-T	T	98.3/17.4
C25	4030007090	S.CER C1608 CH 1H 470J-T	T	96.8/17.4
C26	4030007090	S.CER C1608 CH 1H 470J-T	B	86.5/15.9
C27	4030011810	S.CER C1608 JB 1A 224K-T	B	86.5/17.3
C28	4030006900	S.CER C1608 JB 1H 103K-T	T	62.5/73.5
C29	4030007090	S.CER C1608 CH 1H 470J-T	T	34/26.5
C30	4030007090	S.CER C1608 CH 1H 470J-T	B	26.7/32.8
C41	4510008490	S.ELE EEE1C0100SR	B	24.2/5.6
C42	4030011600	S.CER C1608 JB 1E 104K-T	T	47.5/3.4
C43	4510008520	S.ELE EEE1CA470SP	B	29.7/5.2
C44	4030011600	S.CER C1608 JB 1E 104K-T	T	30.3/16.9
C45	4510008850	S.ELE EEE1CA101P	B	10.5/5.9
C47	4030011600	S.CER C1608 JB 1E 104K-T	T	95.4/35.7
C48	4030008890	S.CER C1608 JB 1H 273K-T	B	29.5/24
C49	4030008890	S.CER C1608 JB 1H 273K-T	B	25.1/20.8
C56	4030011600	S.CER C1608 JB 1E 104K-T	T	49.7/7
C57	4550006250	S.TAN TEESVA 1A 106M8R	T	48.6/10.7
C58	4510007130	S.ELE EEFCD 0J 470R	T	16.9/10.6
C59	4030011600	S.CER C1608 JB 1E 104K-T	T	27.2/16.4
C60	4510008520	S.ELE EEE1CA470SP	B	18.7/5.1
C61	4030006850	S.CER C1608 JB 1H 471K-T	T	27.2/17.6
C62	4030011600	S.CER C1608 JB 1E 104K-T	T	21.4/15.2
C63	4030006850	S.CER C1608 JB 1H 471K-T	T	6.1/7.7
C64	4550006250	S.TAN TEESVA 1A 106M8R	T	28.5/19.4
C65	4030011600	S.CER C1608 JB 1E 104K-T	T	27.7/21.8
C66	4030007000	S.CER C1608 CH 1H 090D-T	T	31.4/30.9
C67	4030006900	S.CER C1608 JB 1H 103K-T	T	27.2/24.5
C68	4030011600	S.CER C1608 JB 1E 104K-T	T	26.2/27
C69	4030007130	S.CER C1608 CH 1H 101J-T	B	25/23
C70	4030012600	S.CER C2012 JB 1A 105M-T	B	27/31.2
C71	4030011600	S.CER C1608 JB 1E 104K-T	B	26.8/29.6
C72	4030006860	S.CER C1608 JB 1H 102K-T	B	12.5/35
C73	4030006860	S.CER C1608 JB 1H 102K-T	B	12.5/33.8
C74	4550006050	S.TAN TEESVA 0J 106M8R	T	45.7/15.4
C75	4030011600	S.CER C1608 JB 1E 104K-T	T	21.5/19.7
C76	4550006730	S.TAN TEESVB 0J 226M8R	T	18.1/22.5
C77	4550006250	S.TAN TEESVA 1A 106M8R	T	23.1/16
C78	4550006050	S.TAN TEESVA 0J 106M8R	B	68.8/32.3
C80	4550006250	S.TAN TEESVA 1A 106M8R	B	13.9/31.8
C81	4030011600	S.CER C1608 JB 1E 104K-T	B	14.7/29.9
C82	4030011600	S.CER C1608 JB 1E 104K-T	B	14.8/28.4
C84	4030007090	S.CER C1608 CH 1H 470J-T	B	09.8/45.3
C85	4030006860	S.CER C1608 JB 1H 102K-T	T	12.5/36.4
C86	4030006900	S.CER C1608 JB 1H 103K-T	B	58.7/58.9
C87	4030006850	S.CER C1608 JB 1H 471K-T	B	63.8/29.9
C88	4030007050	S.CER C1608 CH 1H 220J-T	T	7.2/51.4
C89	4030009520	S.CER C1608 CH 1H 020B-T	T	6.5/42
C90	4030007040	S.CER C1608 CH 1H 180J-T	T	10.3/45.4
C91	4030011600	S.CER C1608 JB 1E 104K-T	B	63.8/28.6
C92	4030011600	S.CER C1608 JB 1E 104K-T	B	3.6/29.9
C93	4030006900	S.CER C1608 JB 1H 103K-T	B	72.8/35.3
C94	4030006900	S.CER C1608 JB 1H 103K-T	T	9.8/47.4
C95	4030006900	S.CER C1608 JB 1H 103K-T	T	50.1/48
C96	4030011600	S.CER C1608 JB 1E 104K-T	B	10.5/45.2
C97	4030006900	S.CER C1608 JB 1H 103K-T	B	28.2/41.7
C98	4030006860	S.CER C1608 JB 1H 102K-T	B	70.6/43.1
C99	4030008560	S.CER C1608 CH 1H 300J-T	T	78.5/34.7

**[LOGIC-R UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
C100	4030008560	S.CER C1608 CH 1H 300J-T	T	78.5/33.5
C101	4030006900	S.CER C1608 JB 1H 103K-T	B	90.3/54.2
C102	4030006900	S.CER C1608 JB 1H 103K-T	T	9.8/56.4
C103	4030007080	S.CER C1608 CH 1H 390J-T	T	10.4/58.4
C105	4030011600	S.CER C1608 JB 1E 104K-T	B	39/41.2
C106	4550006780	S.TAN TEESVB 0J 476M8R	B	40/38.7
C107	4030011600	S.CER C1608 JB 1E 104K-T	T	59.6/40.9
C108	4030007090	S.CER C1608 CH 1H 470J-T	B	58.7/41.5
C109	4030007040	S.CER C1608 CH 1H 180J-T	T	5.5/63.4
C110	4030006900	S.CER C1608 JB 1H 103K-T	B	8.2/58
C111	4030011600	S.CER C1608 JB 1E 104K-T	B	15.1/63.2
C112	4030011600	S.CER C1608 JB 1E 104K-T	T	14.6/53.6
C113	4030006900	S.CER C1608 JB 1H 103K-T	T	27.6/65.1
C115	4030007090	S.CER C1608 CH 1H 470J-T	B	87.2/49.4
C116	4030007090	S.CER C1608 CH 1H 470J-T	T	88.6/53.6
C117	4030011600	S.CER C1608 JB 1E 104K-T	T	14.1/41.1
C118	4030011600	S.CER C1608 JB 1E 104K-T	B	93.1/65.9
C119	4030007090	S.CER C1608 CH 1H 470J-T	T	57.2/27.7
C120	4030008560	S.CER C1608 CH 1H 300J-T	T	48.1/24.8
C121	4030008560	S.CER C1608 CH 1H 300J-T	T	46.9/24.8
C122	4030007090	S.CER C1608 CH 1H 470J-T	B	63.6/64.2
C123	4030007090	S.CER C1608 CH 1H 470J-T	B	86.6/55.3
C124	4030011600	S.CER C1608 JB 1E 104K-T	B	93.2/64.4
C125	4030007090	S.CER C1608 CH 1H 470J-T	B	50.9/25.1
C126	4030011600	S.CER C1608 JB 1E 104K-T	B	55.5/22
C127	4030011600	S.CER C1608 JB 1E 104K-T	B	63.5/23.5
C131	4030006900	S.CER C1608 JB 1H 103K-T	B	53.9/32.9
C132	4550006250	S.TAN TEESVA 1A 106M8R	B	58/33.8
C133	4030008900	S.CER C1608 JB 1H 333K-T	T	54.3/16.7
C136	4030011600	S.CER C1608 JB 1E 104K-T	T	67.4/76
C137	4030007130	S.CER C1608 CH 1H 101J-T	T	60.5/22.2
C138	4030007050	S.CER C1608 CH 1H 220J-T	T	99.5/12.2
C139	4030007050	S.CER C1608 CH 1H 220J-T	T	98/12.2
C140	4030006660	S.CER C1608 JB 1H 102K-T	B	55.8/34.3
C141	4550000460	S.TAN TEESVA 1C 105M8R	B	95.1/21.5
C142	4550000460	S.TAN TEESVA 1C 105M8R	B	102.8/17
C143	4550000460	S.TAN TEESVA 1C 105M8R	B	81.4/13
C144	4550000460	S.TAN TEESVA 1C 105M8R	T	84.1/21.8
C145	4510007400	S.ELE EEFCD 1C 8R2R	T	11.6/2.8
J1	6510022710	S.CNR 30FLZ-SM1-TB	T	100.6/5.5
J2	6510022710	S.CNR 30FLZ-SM1-TB	T	78.8/5.5
J4	6510019271	S.CNR 52365-0671	T	08.4/40.2
J5	6510021431	S.CNR S8B-ZR-SM4A-TF (LF) (SN)	T	95.6/75.4
J6	6510023861	S.CNR S9B-ZR-SM4A-TF (LF) (SN)	B	95/5.7
W1	8900013161	CBL OPC-1313A		

**[LOGIC-T UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
IC1	1110005290	S.IC NJM2115V-TE1	B	28.3/49.1
IC2	1110005290	S.IC NJM2115V-TE1	B	28.1/61.1
IC3	1130007301	S.IC TC4W66FU (TE12L,F)	B	103.5/20
IC4	1110005290	S.IC NJM2115V-TE1	B	28.1/71.3
IC5	1180002391	S.REG S-812C33AMC-C2N-G	T	49.9/4.1
IC6	1180001071	S.IC TA7805F (TE16L,Q)	T	27.5/9.8
IC7	1110005440	S.IC NJM2374AM-TE1	T	4.7/13.3
IC9	1130010630	S.IC SN74AHCT541PWR	T	96.4/30.8
IC11	1180002391	S.REG S-812C33AMC-C2N-G	T	18.9/18
IC12	1190001340	S.IC M62334FP 600C	T	49.2/57
IC15	1110002861	S.IC TA755393F (TE85R,F)	B	08.5/40.1
IC16	1130007111	S.IC TC7W04FU (TE12L,F)	B	68.8/29
IC17	1140008650	S.IC HN58X2464TI	T	10.3/31.6
IC18	1130008361	S.IC TC7SHU04FU (TE85L,JF)	T	7.2/45.6
IC19	1130008361	S.IC TC7SHU04FU (TE85L,JF)	B	10.4/47.3
IC20	1190001340	S.IC M62334FP 600C	T	49.2/44.1
IC21	1120002870	S.IC XCS20XL-4TQ144I	T	27.3/51.6
IC22	1130007281	S.IC TC7S32FU (TE85R,F)	B	68.9/41.2
IC23	1110005731	S.IC S-80928CNMC-G8Y-G	B	90/51.6
IC24	1130008361	S.IC TC7SHU04FU (TE85L,JF)	T	7/58.4
IC25	1130008361	S.IC TC7SHU04FU (TE85		

**[LOGIC-T UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
Q9	1520000201	S.TR 2SB798-T2-AZ DK	B	71.3/14.5
Q11	1590000430	S.TR DTC144EUA T106	B	111.2/35.7
Q12	1590000440	S.TR DTA143ZUA T106	B	93.7/38.5
Q13	1590003500	S.TR DTC114YE TL	B	107.4/35.4
Q14	1590000430	S.TR DTC144EUA T106	B	58.9/22.6
D2	1790000671	S.DIO SB07-03C-TB-E	T	10.9/6.7
D3	1750000550	S.DIO 1SS355 TE-17	T	43.4/10.5
D4	1790000671	S.DIO SB07-03C-TB-E	T	16.5/21.6
D5	1790000671	S.DIO SB07-03C-TB-E	T	42.1/14.5
D6	1750000550	S.DIO 1SS355 TE-17	B	112.4/42.4
D7	1730002280	S.ZEN MA8091-M (TX)	B	110.1/47
D8	1730002280	S.ZEN MA8091-M (TX)	T	110.8/36.1
D9	1750000841	S.VCP 1SV324 (TPH3,F)	T	10/43.1
D11	1750000550	S.DIO 1SS355 TE-17	B	101.8/40.5
D12	1750000550	S.DIO 1SS355 TE-17	B	97.9/42.4
D13	1750000550	S.DIO 1SS355 TE-17	B	97.9/40.6
D15	1750000841	S.VCP 1SV324 (TPH3,F)	T	10.1/6.6
D16	1790001240	S.DIO MA2S728-(TX)	T	59.1/44.3
D17	1790001240	S.DIO MA2S728-(TX)	T	59/46.7
X1	6050011240	S.XTL CR-708 (16.384 MHz)	T	3.7/45.9
X2	6050011290	S.XTL CR-715 (6 MHz)	T	80.9/30.8
X3	6050011700	S.XTL CR-760 (9.8304 MHz)	T	3.9/58.1
X4	6050011290	S.XTL CR-715 (6 MHz)	T	43.2/25.2
L1	6200003590	S.COL EXCCL3225U1	B	92.1/13
L2	6200003590	S.COL EXCCL3225U1	B	105.7/10.3
L3	6200003590	S.COL EXCCL3225U1	T	4.1/22.6
L4	6190001561	S.COL CDRH5D18NP-101NC	T	10.7/18.5
L5	6190001561	S.COL CDRH5D18NP-101NC	T	10.7/11.5
L7	6200005741	S.COL ELJRE 47NGFA	B	3.7/30.5
L8	6200005741	S.COL ELJRE 47NGFA	B	69.7/34.9
L9	6200005741	S.COL ELJRE 47NGFA	B	105.3/44
L10	6200005741	S.COL ELJRE 47NGFA	B	69.7/36.9
L11	6200005741	S.COL ELJRE 47NGFA	B	56.4/37.5
L12	6200006991	S.COL ELJRE 56NGFA	B	52.6/23.2
L15	6200002041	S.COL NLV25T-101J	T	61.4/24.8
L16	6200005741	S.COL ELJRE 47NGFA	T	61.7/22.9
R1	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	91.3/16.2
R3	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	96.8/13.7
R4	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	98.3/13.7
R5	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	99.8/13.7
R6	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	101.3/13.7
R7	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	102.8/13.7
R8	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	104.3/13.7
R9	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	105.8/13.7
R10	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	107.3/13.7
R11	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	108.8/13.7
R12	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	110.3/13.7
R18	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	86.4/12.3
R19	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	85/12.3
R20	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	87.9/17.5
R21	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	86.2/17.5
R22	7030003590	S.RES ERJ3GEYJ 183 V (18 k)	T	87.9/21
R23	7030003590	S.RES ERJ3GEYJ 183 V (18 k)	T	86.2/21
R24	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	32.9/58.4
R25	7030003600	S.RES ERJ3GEYJ 223 V (22 k)	B	34.3/55.1
R26	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	23.4/58.4
R27	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	25.9/54.2
R28	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	25.9/66
R29	7030000420	S.RES MCR10EZHZ 2.2 k	T	36.6/13.8
R30	7030000420	S.RES MCR10EZHZ 2.2 k	T	36.6/11.9
R31	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	34.5/16.3
R32	7030000180	S.RES MCR10EZHZ 22 (220)	T	33.2/13.8
R33	703000180	S.RES MCR10EZHZ 22 (220)	T	33.2/11.9
R34	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	93.3/19.5
R35	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	99.2/21.8
R36	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	103.1/23.4
R37	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	103.7/28.4
R38	7030003470	S.RES ERJ3GEYJ 182 V (1.8 k)	B	108/17.2
R40	7030003470	S.RES ERJ3GEYJ 182 V (1.8 k)	T	83.4/15.9
R41	7030003590	S.RES ERJ3GEYJ 183 V (18 k)	B	86.5/14.5
R42	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	32.9/61.3
R43	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	37.3/58.4
R44	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	35.8/58.4
R45	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	20.5/58.4
R46	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	23.4/61.3
R47	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	19.1/58.4
R48	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	26/76.3
R49	7030003600	S.RES ERJ3GEYJ 223 V (22 k)	B	22.6/55
R50	7030003860	S.RES ERJ3GE JPW V	T	25.3/47.9
R51	7030003600	S.RES ERJ3GEYJ 223 V (22 k)	T	5.2/19.7
R52	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)	T	4/19.7
R53	703000020	S.RES MCR10EZHZ 1 (010)	B	3.8/16.4
R54	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	B	32.9/66

**[LOGIC-T UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
R55	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	B	34.3/68.8
R56	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	B	34.3/71.5
R57	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	B	23.4/66
R58	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	B	21.9/68.8
R59	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	B	21.9/71.6
R60	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	T	6.6/19
R61	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	48.5/13.5
R62	7030003470	S.RES ERJ3GEYJ 182 V (1.8 k)	B	44.8/12.5
R64	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	29/38.5
R65	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	31.2/35
R74	7030003521	S.RES ERA3YED 103V (10 k)	T	28.5/72.7
R75	7030003521	S.RES ERA3YED 103V (10 k)	T	29.5/71.4
R76	7030003521	S.RES ERA3YED 103V (10 k)	T	31.2/72.7
R77	7030003521	S.RES ERA3YED 103V (10 k)	T	32.2/71.4
R78	7030005661	S.RES ERA3YED 203V (20 k)	T	27.8/69.3
R79	7030005321	S.RES ERA3YED 103V (10 k)	T	13.8/72.7
R80	7030005661	S.RES ERA3YED 203V (20 k)	T	29.1/69.3
R81	7030005321	S.RES ERA3YED 103V (10 k)	T	15.3/71.4
R82	7030005661	S.RES ERA3YED 203V (20 k)	T	30.4/69.3
R83	7030005321	S.RES ERA3YED 103V (10 k)	T	16.5/72.7
R84	7030005661	S.RES ERA3YED 203V (20 k)	T	31.7/69.3
R85	7030005321	S.RES ERA3YED 103V (10 k)	T	18/71.4
R86	7030005661	S.RES ERA3YED 203V (20 k)	T	13.5/69.3
R87	7030005661	S.RES ERA3YED 203V (20 k)	T	14.8/69.3
R88	7030005661	S.RES ERA3YED 203V (20 k)	T	16.1/69.3
R89	7030005661	S.RES ERA3YED 203V (20 k)	T	17.4/69.3
R90	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	T	45.2/10.7
R91	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	B	109.8/44
R92	7030003860	S.RES ERJ3GE JPW V	T	47.7/61
R93	7030003860	S.RES ERJ3GE JPW V	T	48.9/61
R95	7030005321	S.RES ERA3YED 103V (10 k)	T	33.9/72.7
R96	7030005321	S.RES ERA3YED 103V (10 k)	T	34.9/71.4
R97	7030005321	S.RES ERA3YED 103V (10 k)	T	36.6/72.7
R98	7030005321	S.RES ERA3YED 103V (10 k)	T	37.6/71.4
R99	7030005321	S.RES ERA3YED 103V (10 k)	T	39.3/72.7
R100	7030005661	S.RES ERA3YED 203V (20 k)	T	33/69.3
R101	7030005321	S.RES ERA3YED 103V (10 k)	T	19.2/72.7
R102	7030005661	S.RES ERA3YED 203V (20 k)	T	34.3/69.3
R103	7030005321	S.RES ERA3YED 103V (10 k)	T	20.7/71.4
R104	7030005661	S.RES ERA3YED 203V (20 k)	T	35.6/69.3
R105	7030005321	S.RES ERA3YED 103V (10 k)	T	21.9/72.7
R106	7030005661	S.RES ERA3YED 203V (20 k)	T	36.9/69.3
R107	7030005321	S.RES ERA3YED 103V (10 k)	T	23.4/71.4
R108	7030005661	S.RES ERA3YED 203V (20 k)	T	38.2/69.3
R109	7030005321	S.RES ERA3YED 103V (10 k)	T	24.6/72.7
R110	7030005661	S.RES ERA3YED 203V (20 k)	T	18.7/69.3
R111	7030005661	S.RES ERA3YED 203V (20 k)	T	20/69.3
R112	7030005661	S.RES ERA3YED 203V (20 k)	T	21.3/69.3
R113	7030005661	S.RES ERA3YED 203V (20 k)	T	22.6/69.3
R114	7030005661	S.RES ERA3YED 203V (20 k)	T	23.9/69.3
R115	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	B	104.6/37.6
R116	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	B	104.6/39
R117	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)	B	108.2/37.4
R118	7030005321	S.RES ERA3YED 103V (10 k)	T	40.3/71.4
R119	7030005661	S.RES ERA3YED 203V (20 k)	T	41.3/73.5
R120	7030005661	S.RES ERA3YED 203V (20 k)	T	39.5/69.3
R121	7030005321	S.RES ERA3YED 103V (10 k)	T	26.1/71.4
R122	7030005661	S.RES ERA3YED 203V (20 k)	T	40.8/69.3
R123	7030005661	S.RES ERA3YED 203V (20 k)	T	26.6/73.4
R124	7030005661	S.RES ERA3YED 203V (20 k)	T	25.2/69.3
R125	7030005661	S.RES ERA3YED 203V (20 k)	T	26.5/69.3
R126	7030003600	S.RES ERJ3GEYJ 223 V (22 k)	B	105.3/32.9
R127	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	B	92.9/36.3
R128	7030003490	S.RES ERJ3GEYJ 272 V (2.7 k)	B	104.6/35
R129	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	B	106.1/46.3
R130	7030003370	S.RES ERJ3GEYJ 271 V (270)	T	7.2/50.1
R131	7030003800	S.RES ERJ3GEYJ 105 V (1 M)	T	7.2/48.7
R132	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	10.5/50.8
R134	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	66.3/41.2
R135	7030003570	S.RES ERJ3GEYJ 123 V (12 k)	B	102.4/38.1
R136	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	100.9/38.1
R137	7030003570	S.RES ERJ3GEYJ 123 V (12 k)	T	7.4/27.9
R138	7030003570	S.RES ERJ3GEYJ 123 V (12 k)	T	10/26.1
R139	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	B	89.1/48.9
R140	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	9.1/49.4
R141	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	9.1/45.4
R142	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	13.6/44.3
R143	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	12.9/40.4
R145	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	B	66.2/35.5
R146	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	66.2/34
R148	7030003860	S.RES ERJ3GE JPW V	T	68.5/30.1
R149	7030003340	S.RES ERJ3GEYJ 151 V (150)	B	72.8/36.9
R150	7030003360	S.RES ERJ3GEYJ 221 V (220)	B	91/48.2
R151	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	9.1/54.2
R152	7030003680	S.RES ERJ3GEYJ 1		

## [LOGIC-T UNIT]

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
R159	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	B	58.8/47.1
R160	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	59.3/50.1
R161	7030003510	S.RES ERJ3GEYJ 392 V (3.9 k)	B	90/43.8
R162	7030003320	S.RES ERJ3GEYJ 101 V (100 )	B	7.5/56
R163	7030003320	S.RES ERJ3GEYJ 101 V (100 )	B	9.8/62.5
R164	7030003860	S.RES ERJ3GE JPW V	T	43.8/67.1
R165	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	T	39.3/62.6
R166	7030003860	S.RES ERJ3GE JPW V	B	28.4/76.5
R167	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	58.8/57.3
R168	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	54.5/57.8
R169	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	54.5/56.4
R170	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	54.3/45.7
R171	7030003320	S.RES ERJ3GEYJ 101 V (100 )	T	54.3/43.5
R172	7030003340	S.RES ERJ3GEYJ 151 V (150 )	B	56.5/25.9
R173	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	B	54/25.3
R174	7030003580	S.RES ERJ3GEYJ 153 V (15 k)	B	51.1/25.8
R175	7030003550	S.RES ERJ3GEYJ 822 V (8.2 k)	B	51.1/27.3
R176	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)	T	53.3/18
R177	7030003400	S.RES ERJ3GEYJ 471 V (470 )	B	55.9/23.2
R178	7030003860	S.RES ERJ3GE JPW V	B	50.3/20.4
R179	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	65.9/23.5
R180	7030003480	S.RES ERJ3GEYJ 222 V (2.2 k)	B	68.5/24.3
R183	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	B	55.8/31.5
R184	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)	T	56.9/16.6
R185	7030003200	S.RES ERJ3GEYJ 100 V (10 )	T	58.8/19
R186	7030003200	S.RES ERJ3GEYJ 100 V (10 )	T	56.9/18.4
R188	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)	T	85.2/76.3
R189	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)	T	85.2/73.1
R192	7030003860	S.RES ERJ3GE JPW V	T	65.8/30.1
R193	7030003860	S.RES ERJ3GE JPW V	T	68.5/34.3
R194	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	T	03.1/24.7
R195	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	B	50.9/32.2
R196	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	52.4/31.5
R197	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	T	99.2/20.3
C1	4030006860	S.CER C1608.JB 1H 102K-T	B	90.6/18.3
C2	4030006900	S.CER C1608.JB 1H 103K-T	B	01.5/23.2
C3	4030006860	S.CER C1608.JB 1H 102K-T	B	98.6/18.4
C4	4030011600	S.CER C1608.JB 1E 104K-T	B	98.6/20.2
C5	4030011600	S.CER C1608.JB 1E 104K-T	B	94.4/15.3
C7	4030007090	S.CER C1608.CH 1H 470J-T	T	10.3/17.5
C8	4030010760	S.CER C1608.CH 1H 331J-T	B	30/55.7
C9	4550005980	S.TAN TEESVA 1A 475M8R	B	34.3/50.1
C10	4030010760	S.CER C1608.CH 1H 331J-T	B	26.9/55.7
C11	4550006250	S.TAN TEESVA 1A 106M8R	B	26.8/52.3
C12	4550006250	S.TAN TEESVA 1A 106M8R	B	26.8/64.2
C13	4030006900	S.CER C1608.JB 1H 103K-T	B	93.3/20.7
C14	4030006900	S.CER C1608.JB 1H 103K-T	T	02.5/20.6
C15	4030006860	S.CER C1608.JB 1H 102K-T	B	06.6/12.5
C16	4030007130	S.CER C1608.CH 1H 101J-T	B	06.6/13.8
C18	4030007090	S.CER C1608.CH 1H 470J-T	T	08.8/17.5
C19	4030007090	S.CER C1608.CH 1H 470J-T	T	07.3/17.5
C20	4030007090	S.CER C1608.CH 1H 470J-T	T	05.8/17.5
C21	4030007090	S.CER C1608.CH 1H 470J-T	T	04.3/17.5
C22	4030006850	S.CER C1608.JB 1H 471K-T	T	02.8/17.5
C23	4030007090	S.CER C1608.CH 1H 470J-T	T	01.3/17.5
C24	4030007090	S.CER C1608.CH 1H 470J-T	T	98.3/17.5
C25	4030007090	S.CER C1608.CH 1H 470J-T	T	96.8/17.5
C31	4030007170	S.CER C1608.CH 1H 221J-T	B	30/57.7
C32	4030007170	S.CER C1608.CH 1H 221J-T	B	34.3/58.4
C33	4030007170	S.CER C1608.CH 1H 221J-T	B	31.2/57.7
C34	4030007170	S.CER C1608.CH 1H 221J-T	B	34.3/61.3
C35	4030007170	S.CER C1608.CH 1H 221J-T	B	24.9/57.7
C36	4030007170	S.CER C1608.CH 1H 221J-T	B	26.1/57.7
C37	4550005980	S.TAN TEESVA 1A 475M8R	B	22.6/50.1
C38	4030007170	S.CER C1608.CH 1H 221J-T	B	21.9/58.4
C39	4030007170	S.CER C1608.CH 1H 221J-T	B	21.9/61.3
C40	4550006250	S.TAN TEESVA 1A 106M8R	B	26.8/74.4
C41	4510008490	S.ELE EEE1CS100SR	B	42.8/28.6
C42	4030011600	S.CER C1608.JB 1E 104K-T	T	45.5/3.8
C43	4510008520	S.ELE EEE1CA470SP	B	43.2/22.9
C44	4030011600	S.CER C1608.JB 1E 104K-T	T	29.7/17.7
C45	4510008850	S.ELE EEE1CA101P	B	11.8/11.3
C47	4030011600	S.CER C1608.JB 1E 104K-T	T	95.4/35.7
C50	4030009490	S.CER C1608.JB 1H 821K-T	B	34.3/66
C51	4030007140	S.CER C1608.CH 1H 121J-T	B	30.1/67.2
C52	4030009490	S.CER C1608.JB 1H 821K-T	B	21.9/66
C53	4030010040	S.CER C1608.JB 1H 561K-T	B	30.1/68.5
C54	4030007140	S.CER C1608.CH 1H 121J-T	B	26.7/67.2
C55	4030010040	S.CER C1608.JB 1H 561K-T	B	26.7/68.5
C56	4030011600	S.CER C1608.JB 1E 104K-T	T	49.7/7
C57	4550006250	S.TAN TEESVA 1A 106M8R	T	48.6/10.7
C58	4510007130	S.ELE EEFCD 04 70R	T	16.9/10.6
C59	4030011600	S.CER C1608.JB 1E 104K-T	T	27.1/17.2
C60	4510008520	S.ELE EEE1CA470SP	B	23/10.9
C61	4030006850	S.CER C1608.JB 1H 471K-T	T	27.1/18.6
C62	4030011600	S.CER C1608.JB 1E 104K-T	T	23.5/13.8
C63	4030006850	S.CER C1608.JB 1H 471K-T	T	6.1/7.7
C64	4550006250	S.TAN TEESVA 1A 106M8R	T	28/20.3
C65	4030011600	S.CER C1608.JB 1E 104K-T	T	27.2/22

## [LOGIC-T UNIT]

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
C74	4550006050	S.TAN TEESVA 0J 106M8R	T	45.7/16.2
C75	4030011600	S.CER C1608.JB 1E 104K-T	T	21.5/19.7
C76	4550006730	S.TAN TEESVB 0J 226M8R	T	15.6/26.6
C77	4550006250	S.TAN TEESVA 1A 106M8R	T	24.4/19.9
C78	4550006050	S.TAN TEESVA 0J 106M8R	T	72.2/32.2
C79	4030007090	S.CER C1608.CH 1H 470J-T	T	44.6/55.6
C84	4030007090	S.CER C1608.CH 1H 470J-T	B	09.8/45.3
C85	4030006860	S.CER C1608.JB 1H 102K-T	T	113/36.3
C86	4030006900	S.CER C1608.JB 1H 103K-T	B	56.3/49.3
C87	4030006850	S.CER C1608.JB 1H 471K-T	B	63.8/29.9
C88	4030007050	S.CER C1608.CH 1H 220J-T	T	7.2/51.4
C89	4030009520	S.CER C1608.CH 1H 020B-T	T	6.4/41.9
C90	4030007040	S.CER C1608.CH 1H 180J-T	T	10.5/45.4
C91	4030011600	S.CER C1608.JB 1E 104K-T	B	64.5/27.8
C92	4030011600	S.CER C1608.JB 1E 104K-T	B	3.7/29.3
C93	4030006900	S.CER C1608.JB 1H 103K-T	B	72.8/35.3
C94	4030006900	S.CER C1608.JB 1H 103K-T	T	9.8/47.4
C95	4030006900	S.CER C1608.JB 1H 103K-T	T	50.8/48.9
C96	4030011600	S.CER C1608.JB 1E 104K-T	B	10.5/44.3
C97	4030006900	S.CER C1608.JB 1H 103K-T	B	26.4/37.7
C98	4030006860	S.CER C1608.JB 1H 102K-T	B	70.6/43.1
C99	4030008560	S.CER C1608.CH 1H 300J-T	T	78.5/34.4
C100	4030008560	S.CER C1608.CH 1H 300J-T	T	79.2/35.6
C101	4030006900	S.CER C1608.JB 1H 103K-T	B	90.2/54
C102	4030006900	S.CER C1608.JB 1H 103K-T	T	9.9/56.3
C103	4030007080	S.CER C1608.CH 1H 390J-T	T	10.6/58.2
C105	4030011600	S.CER C1608.JB 1E 104K-T	B	39.8/41.3
C106	4550006780	S.TAN TEESVB 0J 476M8R	B	41/38.8
C107	4030011600	S.CER C1608.JB 1E 104K-T	T	59.6/40.9
C108	4030007090	S.CER C1608.CH 1H 470J-T	B	55.5/42.3
C109	4030007040	S.CER C1608.CH 1H 180J-T	T	5.6/62.9
C110	4030006900	S.CER C1608.JB 1H 103K-T	B	8.2/58
C111	4030011600	S.CER C1608.JB 1E 104K-T	B	16.5/59.7
C112	4030011600	S.CER C1608.JB 1E 104K-T	T	43/65.1
C113	4030006900	S.CER C1608.JB 1H 103K-T	T	45/62.4
C114	4030007090	S.CER C1608.CH 1H 470J-T	T	90/51.1
C116	4030007090	S.CER C1608.CH 1H 470J-T	T	88.7/54.1
C117	4030011600	S.CER C1608.JB 1E 104K-T	T	45/63.6
C118	4030011600	S.CER C1608.JB 1E 104K-T	B	92.8/68
C119	4030007090	S.CER C1608.CH 1H 470J-T	T	59.1/29.4
C120	4030008560	S.CER C1608.CH 1H 300J-T	T	46.5/24.9
C121	4030008560	S.CER C1608.CH 1H 300J-T	T	47.8/24.1
C122	4030007090	S.CER C1608.CH 1H 470J-T	B	63.5/65.3
C123	4030007090	S.CER C1608.CH 1H 470J-T	B	86.6/55.3
C124	4030011600	S.CER C1608.JB 1E 104K-T	B	92.8/63.5
C125	4030007090	S.CER C1608.CH 1H 470J-T	B	50.4/23.8
C126	4030011600	S.CER C1608.JB 1E 104K-T	B	55.2/21.2
C127	4030011600	S.CER C1608.JB 1E 104K-T	B	65.8/25.5
C131	4030006900	S.CER C1608.JB 1H 103K-T	B	53.9/31.5
C132	4550006250	S.TAN TEESVA 1A 106M8R	B	59.6/33.9
C133	4030008900	S.CER C1608.JB 1H 333K-T	T	54.3/16.7
C137	4030007130	S.CER C1608.CH 1H 101J-T	T	61.7/21.3
C138	4030007050	S.CER C1608.CH 1H 220J-T	B	99.5/12.2
C139	4030007050	S.CER C1608.CH 1H 220J-T	B	98/12.2
C140	4030006860	S.CER C1608.JB 1H 102K-T	B	56.8/34.5
C141	4550004640	S.TAN TEESVA 1C 105M8R	B	94.1/22.4
C142	4550004640	S.TAN TEESVA 1C 105M8R	B	102.8/17
C143	4550004640	S.TAN TEESVA 1C 105M8R	B	81.4/13
C144	4550004640	S.TAN TEESVA 1C 105M8R	T	84.1/21.8
C145	4550004640	S.TAN TEESVA 1C 105M8R	T	90.2/21.8
C146	4510007400	S.ELE EEFCD 1C 8R2R	T	12.8/2.7
C147	4030006900	S.CER C1608.JB 1H 103K-T	T	85.1/71.6
W1	8900013180	CBL OPC-1312		

## [MAIN-R UNIT]

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
IC2	1180001071	S.IC TA7805F (TE16L,Q)	T	67.5/110.2
IC3	1180001071	S.IC TA7805F (TE16L,Q)	T	80.5/110.5
IC4	1180002020	S.REG BA033FP-E2	T	13/93.5
IC8	1110006670	S.IC NJM2730F-TE1-#ZZZB	T	31.3/62.2
IC9	1140005991	S.IC MB15A02PFV1-G-BND-ERE1	T	42

**[MAIN-R UNIT]**

REF NO.	ORDER NO.	DESCRIPTION		M.	H/V LOCATION
Q7	1530002691	S.TR	2SC4116-GR (TE85R,F)	T	50/65.5
Q9	1530003231	S.TR	2SC5085-Y (TE85R,F)	T	87.5/67.6
Q10	1560000491	S.FET	2SK508-T2B-A K52	T	67.6/66
Q11	1530003231	S.TR	2SC5085-Y (TE85R,F)	T	62/70.5
Q12	1530003231	S.TR	2SC5085-Y (TE85R,F)	T	70.2/73.5
Q13	1560000531	S.FET	2SK880-GR (TE85R,F)	T	10.2/51.8
Q500	1590000430	S.TR	DTC144EUA T106	T	46.5/97.7
Q501	1590000430	S.TR	DTC144EUA T106	T	31.2/97.5
Q502	1510000581	S.TR	2SA1362-GR (TE85R,F)	T	51.5/98
Q503	1510000581	S.TR	2SA1362-GR (TE85R,F)	T	35.7/97.5
Q505	1560000670	S.FET	2SK1771 (TE85L)	T	111/32.7
Q506	1530002680	S.TR	2SC3357-T1	B	115.3/92.3
D1	1790000700	DIO	DSA3A1		
D3	1720000781	S.VCP	HVU350BTRF-E	T	68.5/62.3
FI500	2020001330	CER	CFWLA455KHFA-B0		
FI501	2030000201	S.MLH	FL-349A (70.00 MHz)	T	110.7/46.7
FI503	2040001020	S.SAW	EFCH445MWNP1	B	117.5/83.8
FI504	2040001020	S.SAW	EFCH445MWNP1	B	117.5/103
X1	6050010930	S.XTL	CR-662 (15.3 MHz)	T	16/36.5
X500	6070000150	S.DCR	CDBCB455KCAY24-R0	T	92.2/15.5
X501	6050011470	XTL	CR-729 (69.545 MHz)		
L3	6200007120	S.COL	ELJND 1R0J	T	58.6/63.1
L5	6200007120	S.COL	ELJND 1R0J	T	65.4/70.1
L12	6200005691	S.COL	ELJRE 18NGFA	T	84.8/65.6
L13	6200009700	S.COL	C6328A-28NG-A	T	62.1/62.5
L14	6200005651	S.COL	ELJRE 8N2ZFA	T	86.8/69.8
L16	6200005661	S.COL	ELJRE 10NGFA	T	59.9/69.6
L17	6200005661	S.COL	ELJRE 10NGFA	T	65.7/72.7
L18	6200005671	S.COL	ELJRE 12NGFA	T	49.5/79
L19	6200005711	S.COL	ELJRE 27NGFA	T	69.9/75.5
L20	6200005671	S.COL	ELJRE 12NGFA	T	52.5/79
L21	6200005671	S.COL	ELJRE 12NGFA	T	96.8/67.5
L22	6200005671	S.COL	ELJRE 12NGFA	T	93.8/67.5
L500	62000010300	S.COL	ELJND R68JF	B	109.8/24
L503	6200007820	S.COL	ELJND R33J	T	111/30
L506	6200003630	S.COL	MLF1608D R68K-T	T	110.2/54.4
L508	6200003540	S.COL	MLF1608D R22K-T	T	110.2/57.3
L517	6200005701	S.COL	ELJRE 22NGFA	B	119.7/92.5
L518	6200005681	S.COL	ELJRE 15NGFA	B	116.3/96.9
L523	6200009480	S.COL	C328A-18NJ-A	B	119.1/111.1
L524	6200009480	S.COL	C328A-18NJ-A	B	119/117.5
L525	6200009380	S.COL	C6328A-43NG-A	B	120.6/127.2
L526	6130003000	S.COL	#617DB-1714=P3	T	106.3/70.4
L527	6130003000	S.COL	#617DB-1714=P3	T	112.2/75.6
L528	6130003000	S.COL	#617DB-1714=P3	T	112.2/65.2
L529	6200007700	S.COL	LQW2BHN22NJ03L	B	113.9/107.9
L530	6200009351	S.COL	ELJRE R22GFA	T	67.7/59.7
R1	7030003530	S.RES	ERJ3GEYJ 562 V (5.6 k)	T	20.5/87.3
R2	7030003450	S.RES	ERJ3GEYJ 122 V (1.2 k)	T	20.5/84.4
R3	7540000280	S.ASB	ERZVF2M220	B	71.2/123.7
R4	7030003860	S.RES	ERJ3GE JPW V	T	21/91.2
R28	7510001560	S.TMR	NTCG16 4BH 102KT	T	115.2/30.2
R33	7030003500	S.RES	ERJ3GEYJ 332 V (3.3 k)	T	48/65.5
R35	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	34.4/57.3
R37	7030003500	S.RES	ERJ3GEYJ 332 V (3.3 k)	T	36.3/62.1
R38	7030003480	S.RES	ERJ3GEYJ 222 V (2.2 k)	T	41.4/64.1
R39	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	48/71.7
R40	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	86.8/71.2
R41	7030003440	S.RES	ERJ3GEYJ 102 V (1 k)	T	42.5/76
R42	7030003290	S.RES	ERJ3GEYJ 560 V (56)	T	47.2/77
R45	7030003560	S.RES	ERJ3GEYJ 103 V (10 k)	T	85.3/67.7
R46	7030003520	S.RES	ERJ3GEYJ 472 V (4.7 k)	T	86.9/64.8
R47	7030003280	S.RES	ERJ3GEYJ 470 V (47)	T	86.1/74.6
R48	7030003200	S.RES	ERJ3GEYJ 100 V (10)	T	57.7/66.2
R49	7030003350	S.RES	ERJ3GEYJ 181 V (180)	T	68.5/69.6
R50	7030003280	S.RES	ERJ3GEYJ 470 V (47)	T	89.5/64.8
R51	7030003560	S.RES	ERJ3GEYJ 103 V (10 k)	T	35.7/77.6
R52	7030003680	S.RES	ERJ3GEYJ 104 V (100 k)	T	61.8/68.6
R53	7030003560	S.RES	ERJ3GEYJ 103 V (10 k)	T	35.7/73.7
R54	7030003560	S.RES	ERJ3GEYJ 103 V (10 k)	T	35.7/77.1
R55	7030003400	S.RES	ERJ3GEYJ 471 V (470)	T	58.5/69.6
R56	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	35.7/70
R57	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	35.7/72.5
R58	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	35.7/75
R59	7030003570	S.RES	ERJ3GEYJ 123 V (12 k)	T	67.8/73.4
R60	7030003600	S.RES	ERJ3GEYJ 223 V (22 k)	T	68/71.5
R61	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	65.7/74.1
R62	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	72.2/70.7
R63	7030003440	S.RES	ERJ3GEYJ 102 V (1 k)	T	9.2/27.2
R64	7030003860	S.RES	ERJ3GE JPW V	T	7/32.4
R65	7030003560	S.RES	ERJ3GEYJ 103 V (10 k)	T	14.7/31

**[MAIN-R UNIT]**

REF NO.	ORDER NO.	DESCRIPTION		M.	H/V LOCATION
R66	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	17.2/40.8
R501	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	76.1/19.6
R503	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	73.1/4.7
R504	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	74.8/11.8
R505	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	57.2/103.5
R506	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	44.2/97.5
R507	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	29.2/97.2
R508	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	75.7/27.9
R509	7030003700	S.RES	ERJ3GEYJ 154 V (150 k)	T	78.3/18.6
R510	7030003440	S.RES	ERJ3GEYJ 102 V (1 k)	T	49/97.7
R511	7030003440	S.RES	ERJ3GEYJ 102 V (1 k)	T	33.2/97.2
R512	7030003640	S.RES	ERJ3GEYJ 473 V (47 k)	T	74.8/14.6
R513	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	35.7/77.5
R514	7030003650	S.RES	ERJ3GEYJ 563 V (56 k)	T	81.1/18.6
R515	7030003680	S.RES	ERJ3GEYJ 104 V (100 k)	T	51.5/95.5
R516	7030003680	S.RES	ERJ3GEYJ 104 V (100 k)	T	35.7/95
R517	7030003570	S.RES	ERJ3GEYJ 123 V (12 k)	T	78.2/16.6
R518	7030003560	S.RES	ERJ3GEYJ 103 V (10 k)	T	81.2/15.3
R519	7030003650	S.RES	ERJ3GEYJ 563 V (56 k)	T	75.5/23.5
R525	7030003280	S.RES	ERJ3GEYJ 470 V (47)	T	94.2/19.5
R526	7030003480	S.RES	ERJ3GEYJ 222 V (2.2 k)	B	92.2/18.7
R527	7030003560	S.RES	ERJ3GEYJ 103 V (10 k)	B	103.7/23.7
R528	7030003730	S.RES	ERJ3GEYJ 274 V (270 k)	B	96.2/17.2
R530	7030003450	S.RES	ERJ3GEYJ 122 V (1.2 k)	T	97/15.6
R532	7030003200	S.RES	ERJ3GEYJ 100 V (10)	T	114.5/32.2
R534	7030003200	S.RES	ERJ3GEYJ 100 V (10)	T	107/33
R535	7030003520	S.RES	ERJ3GEYJ 472 V (4.7 k)	T	108.5/33
R536	7030003550	S.RES	ERJ3GEYJ 822 V (8.2 k)	T	107.7/35.2
R537	7030003420	S.RES	ERJ3GEYJ 681 V (680)	T	111/28.2
R539	7030003330	S.RES	ERJ3GEYJ 121 V (120)	T	113.7/30.2
R542	7030003860	S.RES	ERJ3GE JPW V	B	36.6/109.2
R553	7030003560	S.RES	ERJ3GEYJ 103 V (10 k)	B	112.8/80.6
R554	7030003560	S.RES	ERJ3GEYJ 103 V (10 k)	B	112.8/87
R555	7030003260	S.RES	ERJ3GEYJ 330 V (33)	B	119.5/89.2
R556	7030003320	S.RES	ERJ3GEYJ 101 V (100)	B	120.6/93.8
R557	7030003490	S.RES	ERJ3GEYJ 272 V (2.7 k)	B	119.4/96.8
R558	7030003450	S.RES	ERJ3GEYJ 122 V (1.2 k)	B	116.3/95.5
R559	7030003560	S.RES	ERJ3GEYJ 103 V (10 k)	B	112.8/99.8
R562	7510001670	S.TMR	NTCG16 4BH 103KT	T	19.2/87.3
R568	7030003440	S.RES	ERJ3GEYJ 102 V (1 k)	T	40.2/62.1
R575	7030003640	S.RES	ERJ3GEYJ 473 V (47 k)	T	82.5/15.3
R576	7030004030	S.RES	ERJ3GEYJ 5R6 V (5.6)	T	99.9/67.4
R577	7030003430	S.RES	ERJ3GEYJ 821 V (820)	T	99.1/65.3
R578	7030003430	S.RES	ERJ3GEYJ 821 V (820)	T	100.6/65.3
R579	7030003860	S.RES	ERJ3GE JPW V	T	104.9/74.2
R581	7030003340	S.RES	ERJ3GEYJ 151 V (150)	T	108.4/75
R582	7030003860	S.RES	ERJ3GE JPW V	T	116.3/75.2
R583	7030003280	S.RES	ERJ3GEYJ 470 V (47)	T	116.5/66.5
R584	7030003860	S.RES	ERJ3GE JPW V	T	106.7/64.2
R585	7030003320	S.RES	ERJ3GEYJ 101 V (100)	T	78.7/11.7
R587	7030003290	S.RES	ERJ3GEYJ 560 V (56)	B	75.4/73.5
R588	7030003860	S.RES	ERJ3GE JPW V	B	106.5/15
R589	7030003860	S.RES	ERJ3GE JPW V	T	110.3/38
R590	7030003860	S.RES	ERJ3GE JPW V	T	109.6/40.3
R591	7030003380	S.RES	ERJ3GEYJ 331 V (330)	T	111.9/39.4
R592	7030003860	S.RES	ERJ3GE JPW V	T	103.2/67.4
R593	7030003860	S.RES	ERJ3GE JPW V	T	103.4/74.2
R594	7030003320	S.RES	ERJ3GEYJ 101 V (100)	B	120.6/95
C1	4030007090	S.CER	C1608 CH 1H 470J-T	B	44.7/106.2
C2	4030011600	S.CER	C1608 JB 1E 104K-T	T	19.2/84.4
C3	4030007090	S.CER	C1608 CH 1H 470J-T	B	43.2/106.2
C4	4030006900	S.CER	C1608 JB 1H 103K-T	B	27.8/108.3
C5	4030007090	S.CER	C1608 CH 1H 470J-T	B	41.2/106.2
C6	4510004601	S.ELE	16 ME 1000 HC+T0	B	54.4/124.3
C7	4030006860	S.CER	C1608 JB 1H 102K-T	B	56.2/124.3
C8	4030006850	S.CER	C1608 JB 1H 471K-T	B	58/124.3
C9	4030007130	S.CER	C1608 CH 1H 101J-T	B	22.2/114.1
C10	4510008520	S.ELE	EEE1CA470SP	T	78/99
C11	4510008520	S.ELE	EEE1CA470SP	T	63.5/99
C12	4510008520	S.ELE	EEE1CA470SP	T	28.4/114.8
C13	4030008630	S.CER	C1608 JF 1H 104Z-T	B	63/106.2
C14	4030008630	S.CER	C1608 JF 1H 471K-T	T	63/106.2
C15	4030011600	S.CER	C1608 JB 1E 104K-T	T	76/106.5
C16	4030011600	S.CER	C1608 JB 1E 104K-T	T	18.7/92
C17	40				

**[MAIN-R UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
C74	4550006350	S.TAN TEESVB2 1A 226M8R	T	45.7/60.7
C75	4550006350	S.TAN TEESVB2 1A 226M8R	T	49.2/60.7
C77	4030011600	S.CER C1608 JB 1E 104K-T	T	52.7/64.7
C78	4550006350	S.TAN TEESVB2 1A 226M8R	T	52.7/60.7
C79	455000550	S.TAN TEESVA 1V 224M8R	T	37.4/65.5
C80	4550005980	S.TAN TEESVA 1A 475M8R	T	35.2/65.4
C81	4030006900	S.CER C1608 JB 1H 103K-T	T	50/72.5
C82	4030006900	S.CER C1608 JB 1H 103K-T	T	41.4/66.8
C83	4030011600	S.CER C1608 JB 1E 104K-T	T	42.5/77.5
C84	4030006860	S.CER C1608 JB 1H 102K-T	T	57.2/69.6
C85	4030006900	S.CER C1608 JB 1H 103K-T	T	50/71
C86	4030009920	S.CER C1608 CH 1H 050B-T	T	82.6/64.9
C87	4030009910	S.CER C1608 CH 1H 040B-T	T	65.6/62.3
C88	4610001590	S.TRI TZC3R100A110R00	T	72/63.2
C89	4030009520	S.CER C1608 CH 1H 020B-T	T	65.6/61
C90	4030006860	S.CER C1608 JB 1H 102K-T	T	45.7/77
C91	4030006860	S.CER C1608 JB 1H 102K-T	T	82.7/69.6
C92	4030006860	S.CER C1608 JB 1H 102K-T	T	45.7/67.7
C93	4030006860	S.CER C1608 JB 1H 102K-T	T	87.6/74.6
C95	4030009540	S.CER C1608 CH 1H 1R5B-T	T	66.2/63.6
C96	4030006960	S.CER C1608 CH 1H 050C-T	T	65/65.7
C97	4030006960	S.CER C1608 CH 1H 050C-T	T	67.6/68.4
C98	4030009570	S.CER C1608 CH 1H 0R3B-T	T	64.7/68.4
C99	4030007130	S.CER C1608 CH 1H 101J-T	T	59/60
C100	4030006860	S.CER C1608 JB 1H 102K-T	T	86.8/72.5
C101	4030006860	S.CER C1608 JB 1H 102K-T	T	90.9/68.9
C102	4030006860	S.CER C1608 JB 1H 102K-T	T	58.4/71.7
C103	4030006860	S.CER C1608 JB 1H 102K-T	T	61.8/67.3
C104	4030009530	S.CER C1608 CH 1H 030B-T	T	61.4/72.8
C106	4030006860	S.CER C1608 JB 1H 102K-T	T	63.5/75
C107	4030006970	S.CER C1608 CH 1H 060D-T	T	48.7/77
C108	4030006930	S.CER C1608 CH 1H 020C-T	T	49.5/80.2
C109	4030006860	S.CER C1608 JB 1H 102K-T	T	70.7/70.7
C110	4030007020	S.CER C1608 CH 1H 120J-T	T	51.7/77
C111	4030009520	S.CER C1608 CH 1H 020B-T	T	52.5/80.2
C112	4030007090	S.CER C1608 CH 1H 470J-T	T	72.2/74.7
C113	4030006860	S.CER C1608 JB 1H 102K-T	T	67/75.5
C114	4030006970	S.CER C1608 CH 1H 060D-T	T	53.2/77
C115	4030006860	S.CER C1608 JB 1H 102K-T	T	8.5/29.6
C117	4030006860	S.CER C1608 JB 1H 102K-T	T	10.7/27.2
C118	4030007010	S.CER C1608 CH 1H 100D-T	T	13/31
C119	4030006860	S.CER C1608 JB 1H 102K-T	T	20.2/35.2
C120	4030006860	S.CER C1608 JB 1H 102K-T	T	7.7/27.2
C121	4030006860	S.CER C1608 JB 1H 102K-T	T	17.2/42.4
C150	4030006860	S.CER C1608 JB 1H 102K-T	T	88.2/64.7
C151	4030009520	S.CER C1608 CH 1H 020B-T	T	93.8/68.9
C152	4030006930	S.CER C1608 CH 1H 020C-T	T	96.8/68.9
C153	4030006970	S.CER C1608 CH 1H 060D-T	T	93/65.2
C154	4030007020	S.CER C1608 CH 1H 120J-T	T	96.1/65.2
C155	4030006970	S.CER C1608 CH 1H 060D-T	T	97.6/65.3
C500	4030007090	S.CER C1608 CH 1H 470J-T	B	42.7/112
C501	4030007090	S.CER C1608 CH 1H 470J-T	B	40.7/112
C504	4030006900	S.CER C1608 JB 1H 103K-T	T	77.7/28.7
C505	4030011810	S.CER C1608 JB 1A 224K-T	T	83.8/18.6
C506	4510008520	S.ELE EEE1CA470SP	T	54/89.5
C507	4510008520	S.ELE EEE1CA470SP	T	42.1/92.3
C508	4030007170	S.CER C1608 CH 1H 221J-T	B	94.2/16.5
C509	4030007170	S.CER C1608 CH 1H 221J-T	B	94.2/18
C511	4030011600	S.CER C1608 JB 1E 104K-T	T	99/21.5
C512	4030007010	S.CER C1608 CH 1H 100D-T	B	108.1/23.8
C513	4030011600	S.CER C1608 JB 1E 104K-T	T	101/21.5
C515	4030006900	S.CER C1608 JB 1H 103K-T	B	106/23
C516	4550007520	S.TAN F931A106MAABMA	T	105.5/14.5
C518	4030006860	S.CER C1608 JB 1H 102K-T	B	95.2/9.7
C520	4030007120	S.CER C1608 CH 1H 820J-T	T	99/11
C521	4030008920	S.CER C1608 JB 1H 473K-T	B	101.7/12.7
C523	4030006860	S.CER C1608 JB 1H 102K-T	B	100.2/12.7
C524	4030006860	S.CER C1608 JB 1H 102K-T	B	111.7/14
C525	4030006860	S.CER C1608 JB 1H 102K-T	B	109.2/19.7
C526	4030007020	S.CER C1608 CH 1H 120J-T	B	104/19.7
C527	4030006860	S.CER C1608 JB 1H 102K-T	T	114.5/33.7
C528	4030006860	S.CER C1608 JB 1H 102K-T	T	105.7/33
C529	4030006860	S.CER C1608 JB 1H 102K-T	T	110.3/36.6
C530	4030006860	S.CER C1608 JB 1H 102K-T	T	107.7/30.7
C531	4030006900	S.CER C1608 JB 1H 103K-T	T	104.5/33
C533	4030007020	S.CER C1608 CH 1H 120J-T	T	106.2/47.5
C540	4030007050	S.CER C1608 CH 1H 220J-T	T	111.7/54.4
C541	4030006860	S.CER C1608 JB 1H 102K-T	T	111.7/57.3
C554	4030006950	S.CER C1608 CH 1H 040C-T	B	115.9/88.7
C555	4030006850	S.CER C1608 JB 1H 471K-T	B	119.4/98.1
C556	4030006850	S.CER C1608 JB 1H 471K-T	B	119.5/90.8
C557	4030006900	S.CER C1608 JB 1H 103K-T	B	121.5/98.1
C558	4030007010	S.CER C1608 CH 1H 100D-T	B	118.2/107.9
C559	4030006950	S.CER C1608 CH 1H 040C-T	B	113.5/96.9
C560	4030006960	S.CER C1608 CH 1H 050C-T	B	121.3/107.7
C566	4030006860	S.CER C1608 JB 1H 102K-T	B	116.3/98.2
C567	4030007010	S.CER C1608 CH 1H 100D-T	B	114.6/116.1
C568	4030006970	S.CER C1608 CH 1H 060D-T	B	119.5/121.1
C570	4550002890	S.TAN TEESVA 1A 225M8R	T	39.5/65.6
C575	4030011600	S.CER C1608 JB 1E 104K-T	T	76.1/14.6
C578	4030006860	S.CER C1608 JB 1H 102K-T	T	117.1/77.1

**[MAIN-R UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
C579	4030006860	S.CER C1608 JB 1H 102K-T	T	115.5/77.1
C580	4030006900	S.CER C1608 JB 1H 103K-T	T	116.5/65.2
C581	4030006860	S.CER C1608 JB 1H 102K-T	T	116.6/62.8
C582	4030006860	S.CER C1608 JB 1H 102K-T	T	108.7/63.5
C583	4030006900	S.CER C1608 JB 1H 103K-T	T	108.5/78.1
C584	4030009540	S.CER C1608 CH 1H 1R5B-T	B	121.8/116.8
C585	4030009540	S.CER C1608 CH 1H 1R5B-T	B	118.5/114.5
C586	4030006960	S.CER C1608 CH 1H 050C-T	B	114.1/110
C587	4030006860	S.CER C1608 JB 1H 102K-T	T	116.7/68.9
C588	4030006900	S.CER C1608 JB 1H 103K-T	T	81.2/12.3
C590	4030006900	S.CER C1608 JB 1H 103K-T	T	32/59.6
C591	4030007000	S.CER C1608 CH 1H 090D-T	T	89.6/71.2
C592	4030006960	S.CER C1608 CH 1H 050C-T	T	111.7/14.6
C593	4030006900	S.CER C1608 JB 1H 103K-T	T	108.4/76.4
C594	4030006970	S.CER C1608 CH 1H 060D-T	T	118.5/75.6
C595	4030007130	S.CER C1608 CH 1H 101J-T	B	119.5/122.6
J1	6510021720	S.CNR 30FLT-SM1-TB	T	23/107.2
J2	6510021720	S.CNR 30FLT-SM1-TB	T	45/107.2
J3	6510018450	CNR TMP-S01XB1		
W1	8900004880	CBL OPC-465		
EP2	6910013310	S.BEA MMZ1608D121B	T	52.7/66.2

**[MAIN-T UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
IC2	1180001071	S.IC TA7805F (TE16L,Q)	T	77.7/113.2
IC3	1180001071	S.IC TA7805F (TE16L,Q)	T	77.7/106
IC4	1180002020	S.REG BA033FP-E2	T	15.7/95.5
IC5	1130006551	S.IC TC7S08FU (TE85R,F)	B	25.2/62
IC6	1110006670	S.IC NJM2730F-TE1-#ZZZB	B	43/23.7
IC7	1140005991	S.IC MB15A02PFV1-G-BND-ERE1	B	35.2/28.7
IC8	1110006670	S.IC NJM2730F-TE1-#ZZZB	B	43.5/46.5
IC9	1140005991	S.IC MB15A02PFV1-G-BND-ERE1	B	34.7/52.5
IC200	1110002751	S.IC TA75S01F (TE85R,F)	B	87.7/26.5
IC201	1110005410	S.IC RF2485 <1,A>	T	68.2/25.2
IC202	1110004050	S.IC NJM3404AV-TE1-#FMZB	B	82.5/26.2
IC203	1110006610	S.IC PC8106TB-E3	T	66.7/42.2
IC205	1110002751	S.IC TA75S01F (TE85R,F)	T	105.5/78
Q1	1520000201	S.TR 2SB798-T2-AZ DK	T	8/126.5
Q2	1530002280	S.TR 2SC4081 T106 S	T	7.2/120.7
Q4	1530002691	S.TR 2SC4116-GR (TE85R,F)	T	30.7/16.2
Q5	1560000491	S.FET 2SK508-2B-A K52	T	39.2/26.7
Q6	1530003231	S.TR 2SC5085-Y (TE85R,F)	T	53.7/28.8
Q7	1530003231	S.TR 2SC5085-Y (TE85R,F)	T	32.5/31.6
Q8	1530003231	S.TR 2SC5085-Y (TE85R,F)	T	40.7/34.7
Q9	1530002691	S.TR 2SC4116-GR (TE85R,F)	T	20.5/49.7
Q10	1530003231	S.TR 2SC5085-Y (TE85R,F)	T	52.1/48.3
Q12	1560000491	S.FET 2SK508-2B-A K52	T	37.1/50.2
Q13	1530003231	S.TR 2SC5085-Y (TE85R,F)	T	32.3/55.6
Q14	1530003231	S.TR 2SC5085-Y (TE85R,F)	T	40.4/57.8
Q15	1560000531	S.FET 2SK880-GR (TE85R,F)	T	7.7/27.2
Q200	1590000430	S.TR DTC144EUA T106	T	61.2/14
Q201	1510000581	S.TR 2SA1362-GR (TE85R,F)	T	66/15.7
Q202	1590000430	S.TR DTC144EUA T106	T	40.2/9.2
Q203	1590000430	S.TR DTC144EUA T106	T	50.7/92
Q204	1510000581	S.TR 2SA1362-GR (TE85R,F)	T	45/93.5
Q205	1510000581	S.TR 2SA1362-GR (TE85R,F)	T	55.2/93.5
Q206	1530003231	S.TR 2SC5085-Y (TE85R,F)	T	65.5/33.6
Q207	1530003231	S.TR 2SC5085-Y (TE85R,F)	T	78.7/60
Q208	1530003431	S.TR 2SC5226-4-TL-E	T	91.2/61
Q209	1590000680	S.TR DTC114EUA T106	T	90.2/74.7
Q210	1510000581	S.TR 2SA1362-GR (TE85R,F)	T	92.7/79.5
Q211	1560001161	S.FET 2SK3475 (TE12L,F)	T	104.7/60
Q212	1590000680	S.TR DTC114EUA T106	T	109/72.5
D1	1790000700	DIO DSA3A1		
D2	1730002300	S.ZEN MA8082-M (TX)	T	4.2/125.5

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)

S.=Surface mount

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**[MAIN-T UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
D3	1720000781	S.VCP HVU350BTRF-E	T	34.2/21
D5	1720000781	S.VCP HVU350BTRF-E	T	39.6/48.7
D200	1790000950	S.ZEN MA8056-M (TX)	T	97.7/64.2
D202	1790000950	S.ZEN MA8056-M (TX)	T	113.7/72.5
D204	1790000980	S.DIO MA742 (TX)	T	104.5/97.5
D205	1790000980	S.DIO MA742 (TX)	T	99.5/99.2
FI200	2040001020	S.SAW EFCH445MWNP1	T	68.2/61
L1	6200010730	S.COL C2520C-68NG-A	T	34/24.3
L3	6200007120	S.COL ELJND 1R0J	T	31/27.8
L4	6200005701	S.COL ELJRE 22NGFA	T	52.5/32.5
L5	6200007120	S.COL ELJND 1R0J	T	39.3/30.9
L7	6200005661	S.COL ELJRE 10NGFA	T	35.2/33.5
L8	6200005691	S.COL ELJRE 18NGFA	B	39.5/35
L10	6200006991	S.COL ELJRE 56NGFA	T	50.2/31.7
L11	6200005681	S.COL ELJRE 15NGFA	B	42.2/35
L13	6200005671	S.COL ELJRE 12NGFA	T	54.2/49.2
L14	6200005651	S.COL ELJRE 8N2ZFA	T	51/52.2
L15	6200009320	S.COL C3328A-12NG-A	T	34.1/46.6
L16	6200005661	S.COL ELJRE 10NGFA	T	30.2/56
L17	6200005631	S.COL ELJRE 5N6ZFA	T	36.2/56.7
L18	6200005711	S.COL ELJRE 27NGFA	T	39.2/60
L19	6200005671	S.COL ELJRE 12NGFA	B	39.5/59
L20	6200005671	S.COL ELJRE 12NGFA	B	42.2/59
L200	6200009351	S.COL ELJRE R22GFA	B	66.7/22.7
L201	6200005701	S.COL ELJRE 22NGFA	T	60.7/26
L202	6200005741	S.COL ELJRE 47NGFA	T	59.2/41.5
L203	6200009531	S.COL ELJRE R15GFA	T	61.7/41.2
L204	6200005691	S.COL ELJRE 18NGFA	T	73/34.3
L205	6200005721	S.COL ELJRE 33NGFA	T	61/44.7
L206	6200005661	S.COL ELJRE 10NGFA	T	69.5/42
L207	6200005591	S.COL ELJRE 2N7ZFA	T	70.2/44.2
L208	6200005671	S.COL ELJRE 12NGFA	T	71/46.5
L209	6200006991	S.COL ELJRE 56NGFA	T	67.5/34.7
L210	6200005691	S.COL ELJRE 18NGFA	T	71/49.2
L211	6200005661	S.COL ELJRE 10NGFA	T	63.2/36.2
L212	6200005701	S.COL ELJRE 22NGFA	T	60.7/48.5
L213	6200005681	S.COL ELJRE 15NGFA	T	60.7/50
L214	6200005661	S.COL ELJRE 10NGFA	T	75.7/62.2
L215	6200005681	S.COL ELJRE 15NGFA	T	79.2/62.5
L216	6200005691	S.COL ELJRE 18NGFA	T	88.2/61.7
L217	6200005671	S.COL ELJRE 12NGFA	T	92.2/56.2
L218	6200005651	S.COL ELJRE 8N2ZFA	T	99.5/57.7
L219	6200005681	S.COL ELJRE 15NGFA	T	109.7/55.5
L220	6200005681	S.COL ELJRE 15NGFA	T	109.7/58.5
L221	6200011910	S.COL BLM31PG330SN1L	T	94.7/91.2
L222	6200011910	S.COL BLM31PG330SN1L	T	103.1/91.2
L223	6200010160	S.COL AS080440-22N	T	115.5/102
L224	6200011910	S.COL BLM31PG330SN1L	T	111.8/91.2
L225	6200010160	S.COL AS080440-22N	T	109/104.5
L226	6200010150	S.COL AS080340-15N	T	117.7/112.2
L227	6200010150	S.COL AS080340-15N	T	117.7/118.2
L228	6200010150	S.COL AS080340-15N	T	117.7/123.7
L229	6200005671	S.COL ELJRE 12NGFA	T	63/45.5
L230	6200009380	S.COL C6328A-43NG-A	B	120.7/127.2
L231	6200007120	S.COL ELJND 1R0J	T	29.5/47.8
L232	6200007120	S.COL ELJND 1R0J	T	37/54.3
L233	6200009351	S.COL ELJRE R22GFA	T	39/20.6
L234	6200009351	S.COL ELJRE R22GFA	T	39.7/44.5
L235	6200005701	S.COL ELJRE 22NGFA	T	97.1/55
R1	7540000280	S.ASB ERZVF2M220	B	66/124.7
R2	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	8/123
R3	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	9.2/120.7
R4	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	7.2/118.5
R5	7030003860	S.RES ERJ3GE JPW V	T	22.7/9.1
R6	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	16.7/106.2
R8	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	44.7/20.5
R9	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)	T	28.5/16
R11	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	B	38.7/30.2
R12	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	40.2/30.2
R13	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	31.7/29.2
R14	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	34.5/34.2
R15	7030003290	S.RES ERJ3GEYJ 560 V (56)	B	36/34.2
R16	7030003860	S.RES ERJ3GE JPW V	T	31.5/23.7
R17	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	53.1/25.8
R18	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	39.5/24
R19	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	51.7/34.5
R20	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	41.3/28.8
R21	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	39.5/22.7
R22	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	51.7/28.7
R23	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	T	51.7/25.8
R24	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	33/24
R25	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	35/23.2
R26	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	36.2/23.2
R27	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	37.5/23.2
R28	7030003640	S.RES ERJ3GEYJ 473 V (47 k)	T	32.3/29.6

**[MAIN-T UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
R29	7030003360	S.RES ERJ3GEYJ 221 V (220)	T	30.7/35
R30	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	52.5/31
R31	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	T	38.7/34.2
R33	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	35.5/36.5
R34	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	44.2/33.5
R35	7030003500	S.RES ERJ3GEYJ 332 V (3.3 k)	T	18.5/49.5
R36	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	49.2/46.5
R37	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	54.5/52.7
R39	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	51.8/50.3
R40	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	T	49/50.3
R41	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	46.5/47.7
R44	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	41.7/53.2
R45	7030003630	S.RES ERJ3GEYJ 393 V (39 k)	B	40.2/53.2
R46	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	31.2/52.7
R47	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	33.7/58.7
R50	7030003290	S.RES ERJ3GEYJ 560 V (56)	B	35.7/58.2
R51	7030003860	S.RES ERJ3GE JPW V	T	29.5/50.1
R52	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	39.7/52
R53	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	32.2/53.6
R54	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	39.2/47.5
R55	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	39.2/46.5
R56	7030003400	S.RES ERJ3GEYJ 471 V (470)	T	28.7/56
R57	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	B	33.5/46.7
R58	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	34.7/46.7
R59	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	36/46.7
R60	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	37.2/46.7
R61	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	T	38.5/57.7
R62	7030003590	S.RES ERJ3GEYJ 183 V (18 k)	T	39.9/55
R63	7030003360	S.RES ERJ3GEYJ 221 V (220)	T	35.5/59.2
R64	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	43.1/55.5
R65	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	5.6/28.5
R66	7030003390	S.RES ERJ3GEYJ 391 V (390)	T	10.4/29.3
R67	7030003290	S.RES ERJ3GEYJ 560 V (56)	T	15.5/23
R200	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	15.5/106.2
R201	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	40.2/105.5
R203	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	T	37.5/105.5
R205	7030003860	S.RES ERJ3GE JPW V	T	88.2/114
R206	7510001670	S.TMR NTCG16 4BH 103KT	T	89/110.2
R207	7030003450	S.RES ERJ3GEYJ 122 V (1.2 k)	T	91.7/112
R208	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	63.5/14
R209	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	90.7/26.2
R210	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	88.7/23.2
R211	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	90.7/29
R212	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	66/13.2
R213	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	78.2/27
R214	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	78.2/25.7
R215	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	82.2/21.5
R216	7030003550	S.RES ERJ3GEYJ 822 V (8.2 k)	T	81.7/30.7
R217	7030003550	S.RES ERJ3GEYJ 822 V (8.2 k)	T	84/25
R218	7030003230	S.RES ERJ3GEYJ 180 V (18)	T	60.7/23
R219	7030003370	S.RES ERJ3GEYJ 271 V (270)	T	62.7/22.2
R220	7030003370	S.RES ERJ3GEYJ 271 V (270)	T	62.7/23.7
R221	7030003860	S.RES ERJ3GE JPW V	B	86/29.2
R222	7030003590	S.RES ERJ3GEYJ 183 V (18 k)	T	81.7/30.7
R223	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	38/92
R224	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	48.7/92
R225	7030003590	S.RES ERJ3GEYJ 183 V (18 k)	T	81.7/29.5
R226	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	79/30
R227	7030003320	S.RES ERJ3GEYJ 101 V (100)	B	78.2/24.5
R228	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	42.5/91.7
R229	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	52.7/91.7
R230	7030003230	S.RES ERJ3GEYJ 180 V (18)	T	60.7/28.7
R231	7030003370	S.RES ERJ3GEYJ 271 V (270)	T	62.7/28
R232	7030003230	S.RES ERJ3GEYJ 180 V (18)	T	68/30.7
R233	7030003370	S.RES ERJ3GEYJ 271 V (270)	T	65/30.7
R234	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	45/91
R235	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	55.2/91
R236	7030003370	S.RES ERJ3GEYJ 271 V (270)	T	62.7/29.5
R237	7030003370	S.RES ERJ3GEYJ 271 V (270)	T	74.7/30.7
R238	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	70/27
R239	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	71.2/27
R240	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	75.7/24.5
R241	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	74.2/24.5
R242	7030003860	S.RES ERJ3GE JPW V	T	67.5/39.7
R243	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	69/34.7
R244	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	62.4/34.1
R245	7030003520	S.RES ERJ3GEYJ 472 V (4.7 k)	T	65.5/35.5
R246	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	65.5/37
R247	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	73.5/60.2
R248	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	77.7/62.5
R250	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	T	75.7/60.7
R251	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	78.5/64.5
R252	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	75.7/58
R253	7030003860	S.RES ERJ3GE JPW V	T	81.1/61.7
R254	7030004030	S.RES ERJ3GEYJ 5R6 V (5.6)	T	85.2/5

**[MAIN-T UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
R260	7030005430	S.RES ERJ3GEYJ 3R3 V (3.3)	T	93/58.2
R261	7030004030	S.RES ERJ3GEYJ 5R6 V (5.6)	T	95.7/58.2
R262	7030003430	S.RES ERJ3GEYJ 821 V (820)	T	95/60.5
R263	7030003430	S.RES ERJ3GEYJ 821 V (820)	T	96.5/60.5
R264	7030003680	S.RES ERJ3GEYJ 104 V (100 k)	T	92.7/76.7
R265	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	90.2/77.7
R266	7030007860	S.RES ERJ3GEYJ 8R2V (8.2)	T	101/57.7
R267	703000180	S.RES MCR10EZHZ 22 (220)	T	111.2/51.7
R268	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	T	101/60.5
R269	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	T	101/64
R270	7030003530	S.RES ERJ3GEYJ 562 V (5.6 k)	T	99.5/66.7
R271	703000180	S.RES MCR10EZHZ 22 (220)	T	113.2/51.7
R272	7030003460	S.RES ERJ3GEYJ 152 V (1.5 k)	T	99.5/69.7
R274	7030000150	S.RES MCR10EZHZ 12 (120)	T	114/61.2
R275	7030003430	S.RES MCR10EZHZ 470 (471)	T	113/58.5
R277	7030003430	S.RES MCR10EZHZ 470 (471)	T	115/58.5
R279	7030003400	S.RES ERJ3GEYJ 471 V (470)	T	118.5/76
R280	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	112.5/76.7
R281	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	120/76
R282	7030003720	S.RES ERJ3GEYJ 224 V (220 k)	T	105.5/74
R283	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	T	104/100
R284	7030003560	S.RES ERJ3GEYJ 103 V (10 k)	T	102.7/75.5
R285	7030003620	S.RES ERJ3GEYJ 333 V (33 k)	T	102/99.2
R286	7030003740	S.RES ERJ3GEYJ 334 V (330 k)	T	100.5/79.2
R287	7030003710	S.RES ERJ3GEYJ 184 V (180 k)	T	98.5/80
R288	7030003400	S.RES ERJ3GEYJ 471 V (470)	T	99.5/76.2
R290	7030003380	S.RES ERJ3GEYJ 331 V (330)	T	90/55.3
R292	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	T	5.5/45.6
R293	7030003310	S.RES ERJ3GEYJ 820 V (82)	T	54.7/44
R294	7030004030	S.RES ERJ3GEYJ 5R6 V (5.6)	T	62.2/61
R295	7030003430	S.RES ERJ3GEYJ 821 V (820)	T	61.5/63.2
R296	7030003430	S.RES ERJ3GEYJ 821 V (820)	T	63/63.2
R297	7030003440	S.RES ERJ3GEYJ 102 V (1 k)	B	41.7/50.5
R298	7030003310	S.RES ERJ3GEYJ 820 V (82)	T	52.7/44.7
R299	7030003310	S.RES ERJ3GEYJ 820 V (82)	T	52.7/43.2
R300	7030003200	S.RES ERJ3GEYJ 100 V (10)	T	50.2/28.7
R301	7030003290	S.RES ERJ3GEYJ 560 V (56)	B	56/37.1
R302	7030003290	S.RES ERJ3GEYJ 560 V (56)	B	45.8/37.2
R303	7030003290	S.RES ERJ3GEYJ 560 V (56)	B	46.2/59.2
R304	7030003290	S.RES ERJ3GEYJ 560 V (56)	T	72.2/36.2
R305	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	30/32.7
R306	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	38.5/36.5

**[MAIN-T UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
C48	4030006860	S.CER C1608 JB 1H 102K-T	T	29.2/23
C49	4030006860	S.CER C1608 JB 1H 102K-T	B	29.7/31.7
C50	4030009520	S.CER C1608 CH 1H 020B-T	T	39/24.4
C51	4030006860	S.CER C1608 JB 1H 102K-T	T	54.7/33.2
C52	4030006860	S.CER C1608 JB 1H 102K-T	T	29.2/24.5
C53	4030007050	S.CER C1608 CH 1H 220J-T	T	36.5/25
C54	4030006860	S.CER C1608 JB 1H 102K-T	T	53.2/34.5
C55	4030011600	S.CER C1608 JB 1E 104K-T	T	29.2/26.2
C56	4030007050	S.CER C1608 CH 1H 220J-T	T	39/29.2
C57	4030006860	S.CER C1608 JB 1H 102K-T	T	54.5/25.8
C58	4030006860	S.CER C1608 JB 1H 102K-T	T	30.7/36.5
C59	4030009500	S.CER C1608 CH 1H 0R5B-T	T	36.5/28.4
C60	4030009510	S.CER C1608 CH 1H 010B-T	T	48.7/31.7
C61	4030006860	S.CER C1608 JB 1H 102K-T	T	51/36.5
C62	4030006860	S.CER C1608 JB 1H 102K-T	T	29.2/30
C63	4030007090	S.CER C1608 CH 1H 470J-T	T	32.5/33.5
C64	4030006860	S.CER C1608 JB 1H 102K-T	T	32/59.7
C65	4030007050	S.CER C1608 CH 1H 220J-T	B	38.7/37
C66	4030007010	S.CER C1608 CH 1H 100D-T	T	50.2/34.5
C67	4030009540	S.CER C1608 CH 1H 1R5B-T	B	39.5/33.5
C68	4030006860	S.CER C1608 JB 1H 102K-T	T	42.7/33.5
C69	4030006860	S.CER C1608 JB 1H 102K-T	T	37.5/34.2
C70	4030007090	S.CER C1608 CH 1H 470J-T	B	40.2/37
C71	4030007090	S.CER C1608 CH 1H 470J-T	T	42.4/36.5
C72	4030006970	S.CER C1608 CH 1H 060D-T	B	42.2/33.5
C73	4030007050	S.CER C1608 CH 1H 220J-T	B	42.7/37
C75	4550006350	S.TAN TEESVB2 1A 226M8R	T	16.2/44.7
C76	4030009530	S.CER C1608 CH 1H 030B-T	T	52.7/46
C77	4030006860	S.CER C1608 JB 1H 102K-T	T	54.5/51.2
C78	4550006350	S.TAN TEESVB2 1A 226M8R	T	19.7/44.7
C79	4030006860	S.CER C1608 JB 1H 102K-T	T	49.2/47.7
C80	4030011600	S.CER C1608 JB 1E 104K-T	T	23.2/48.7
C81	4550006350	S.TAN TEESVB2 1A 226M8R	T	23.2/44.7
C82	4030006860	S.CER C1608 JB 1H 102K-T	T	51/55.2
C83	4030006860	S.CER C1608 JB 1H 102K-T	T	54.5/54.2
C85	4550000530	S.TAN TEESVA 1V 104M8R	B	45.2/51.7
C86	4550005980	S.TAN TEESVA 1A 475M8R	B	45.2/54
C87	4030006900	S.CER C1608 JB 1H 103K-T	B	29.2/52
C88	4030006860	S.CER C1608 JB 1H 102K-T	T	30.9/50.1
C89	4030006900	S.CER C1608 JB 1H 103K-T	B	38.7/53.2
C90	4030011600	S.CER C1608 JB 1E 104K-T	B	33.7/57.5
C91	4030009910	S.CER C1608 CH 1H 040B-T	T	39.6/46.2
C92	4610001590	S.TRI TZC3R100A110R00	T	43/48
C93	4030009510	S.CER C1608 CH 1H 010B-T	T	37/47.7
C94	4030006900	S.CER C1608 JB 1H 103K-T	B	29.2/53.5
C95	4030006860	S.CER C1608 JB 1H 102K-T	B	37.2/58.2
C96	4030006860	S.CER C1608 JB 1H 102K-T	B	29.2/55.5
C97	4030007130	S.CER C1608 CH 1H 101J-T	T	30.9/45.4
C98	4030009920	S.CER C1608 CH 1H 050B-T	T	34.6/50
C99	4030009920	S.CER C1608 CH 1H 050B-T	T	36.8/52.6
C100	4030009500	S.CER C1608 CH 1H 0R5B-T	T	32.9/51.6
C101	4030006860	S.CER C1608 JB 1H 102K-T	T	29.5/45.4
C102	4030006860	S.CER C1608 JB 1H 102K-T	T	28.8/58.8
C103	4030006860	S.CER C1608 JB 1H 102K-T	T	29.5/53.6
C104	4030009530	S.CER C1608 CH 1H 030B-T	T	33.1/57.5
C105	4030006860	S.CER C1608 JB 1H 102K-T	T	30.2/59.7
C106	4030006860	S.CER C1608 JB 1H 102K-T	T	43.1/57
C107	4030009530	S.CER C1608 CH 1H 030B-T	B	38.7/61
C108	4030009510	S.CER C1608 CH 1H 010B-T	B	39.5/57.7
C109	4030009520	S.CER C1608 CH 1H 020B-T	T	42.8/59.3
C110	4030006860	S.CER C1608 JB 1H 102K-T	T	37/59.2
C111	4030006970	S.CER C1608 CH 1H 060D-T	B	40.2/61
C112	4030009510	S.CER C1608 CH 1H 010B-T	B	42.2/57.7
C113	4030009530	S.CER C1608 CH 1H 030B-T	B	43/61
C114	4030006860	S.CER C1608 JB 1H 102K-T	T	7/30
C115	4030006860	S.CER C1608 JB 1H 102K-T	T	10.4/28.1
C116	4030006860	S.CER C1608 JB 1H 102K-T	T	4.3/28.5
C117	4030007130	S.CER C1608 CH 1H 101J-T	T	11.3/25.5
C118	4030007130	S.CER C1608 CH 1H 101J-T	T	11.3/25.5
C200	4030007090	S.CER C1608 CH 1H 470J-T	B	44.2/106.2
C201	4030006860	S.CER C1608 JB 1H 102K-T	B	37.5/106.7
C202	4030007090	S.CER C1608 CH 1H 470J-T	B	52.5/106.2
C203	4030006860	S.CER C1608 JB 1H 102K-T	B	40.2/106.7
C204	4030006900	S.CER C1608 JB 1H 103K-T	B	15.5/102.2
C205	4030007090	S.CER C1608 CH 1H 470J-T	B	51.2/106.2
C206	4030007090	S.CER C1608 CH 1H 470J-T	B	50/106.2
C207	4030011600	S.CER C1608 JB 1E 104K-T	T	91.7/110.2
C208	4030011600	S.CER C1608 JB 1E 104K-T	T	90.7/23.2
C209	4030011600	S.CER C1608 JB 1E 104K-T	T	88.7/26.5
C210	4030006850	S.CER C1608 JB 1H 471K-T	T	73.7/21.2
C211	4030006860	S.CER C1608 JB 1H 102K-T	T	62.7/20.7
C212	4030011600	S.CER C1608 JB 1E 104K-T	T	73.7/22.7
C213	4030007130	S.CER C1608 CH 1H 101J-T	T	81.7/24.2
C214	4030007130	S.CER C1608 CH 1H 101J-T	T	81.7/28.2
C215	4030006990	S.CER C1608 CH 1H 080D-T	T	62.7/25.2
C216	4030009920	S.CER C1608 CH 1H 050B-T	T	59.5/26
C217	4550006250	S.TAN TEESVA 1A 106M8R	B	79.5/20.7
C218	4030006990	S.CER C1608 CH 1H 080D-T	T	62.7/26.7
C219	4030011600	S.CER C1608 JB 1E 104K-T	B	82.2/20.2
C220	4030007090	S.CER C1608 CH 1H 470J-T	T	74.7/25.2
C221	4030007090	S.CER C1608 CH 1H 470J-T	T	74.7/26.5
C222	4030007090	S.CER C1608 CH 1H 470J-T	T	74.7/27.7

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)

S.=Surface mount

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**[MAIN-T UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
C223	4510008520	S.ELE EEE1CA470SP	T	42.7/99.7
C224	4510008520	S.ELE EEE1CA470SP	T	52.7/100
C225	4030007090	S.CER C1608 CH 1H 470J-T	T	74.7/29
C226	4030009530	S.CER C1608 CH 1H 030B-T	T	60.5/41.5
C227	4030006860	S.CER C1608 JB 1H 102K-T	T	75.1/33.6
C228	4030007090	S.CER C1608 CH 1H 470J-T	B	73.5/21.5
C229	4030007130	S.CER C1608 CH 1H 101J-T	T	63.7/39.8
C230	4030006990	S.CER C1608 CH 1H 080D-T	T	74.7/36.2
C231	4030007090	S.CER C1608 CH 1H 470J-T	B	76.5/22.5
C232	4030006960	S.CER C1608 CH 1H 050C-T	T	73/33.1
C233	4030007090	S.CER C1608 CH 1H 470J-T	B	72/22.9
C234	4030009530	S.CER C1608 CH 1H 030B-T	T	63.7/43.5
C236	4030006990	S.CER C1608 CH 1H 080D-T	T	73.5/36.2
C237	4030007090	S.CER C1608 CH 1H 470J-T	B	68/26.2
C238	4030006860	S.CER C1608 JB 1H 102K-T	T	67.6/44.8
C239	4030007130	S.CER C1608 CH 1H 101J-T	T	72.5/42
C240	4030006860	S.CER C1608 JB 1H 102K-T	T	71/42
C241	4030006860	S.CER C1608 JB 1H 102K-T	T	69.7/32.5
C242	4030009570	S.CER C1608 CH 1H 0R3B-T	T	73.2/44.2
C243	4030007090	S.CER C1608 CH 1H 470J-T	T	70.5/34.7
C244	4030006860	S.CER C1608 JB 1H 102K-T	T	68.2/37
C245	4030006940	S.CER C1608 CH 1H 030C-T	T	73.2/45.7
C246	4030006940	S.CER C1608 CH 1H 030C-T	T	69.5/46.5
C247	4030006860	S.CER C1608 JB 1H 102K-T	T	62.4/32.9
C248	4030007010	S.CER C1608 CH 1H 100D-T	T	73.2/47.2
C249	4030010780	S.CER C1608 CH 1H 1R5C-T	T	69.5/49
C250	4030006960	S.CER C1608 CH 1H 050C-T	T	73.2/49.2
C251	4030007040	S.CER C1608 CH 1H 180J-T	T	67.7/49.2
C252	4030007010	S.CER C1608 CH 1H 100D-T	T	61.7/36.2
C253	4030007040	S.CER C1608 CH 1H 180J-T	T	63.7/48.5
C254	4030006980	S.CER C1608 CH 1H 070D-T	T	66.2/49.2
C255	4030007090	S.CER C1608 CH 1H 470J-T	T	63.7/50
C256	4030007070	S.CER C1608 CH 1H 330J-T	T	63.7/51.7
C257	4030006860	S.CER C1608 JB 1H 102K-T	T	73.5/63
C258	4030006970	S.CER C1608 CH 1H 060D-T	T	75/64.5
C259	4030006850	S.CER C1608 JB 1H 471K-T	T	75.7/59.2
C260	4030006860	S.CER C1608 JB 1H 102K-T	T	80.7/65.2
C261	4030006850	S.CER C1608 JB 1H 471K-T	T	77.7/66.5
C262	4030006860	S.CER C1608 JB 1H 102K-T	T	79.2/66.5
C263	4030009910	S.CER C1608 CH 1H 040B-T	T	83/62.5
C264	4030006850	S.CER C1608 JB 1H 471K-T	T	83/59.7
C265	4030006850	S.CER C1608 JB 1H 471K-T	T	87.5/59.7
C266	4030007020	S.CER C1608 CH 1H 120J-T	T	86.7/63.2
C267	4030006860	S.CER C1608 JB 1H 102K-T	T	93/54
C268	4030006850	S.CER C1608 JB 1H 471K-T	T	93/52.5
C269	4030007020	S.CER C1608 CH 1H 120J-T	T	93.5/60.5
C270	4030006850	S.CER C1608 JB 1H 471K-T	T	94.5/56.7
C271	4030006860	S.CER C1608 JB 1H 102K-T	T	95/76
C272	4030006850	S.CER C1608 JB 1H 471K-T	T	98/57.7
C273	4030007030	S.CER C1608 CH 1H 150J-T	T	98/60.5
C274	4030007020	S.CER C1608 CH 1H 120J-T	T	99.5/60.5
C275	4030006860	S.CER C1608 JB 1H 102K-T	T	99.5/64
C276	4030006860	S.CER C1608 JB 1H 102K-T	T	112/54.2
C277	4030006850	S.CER C1608 JB 1H 471K-T	T	112/55.5
C279	4030006860	S.CER C1608 JB 1H 102K-T	T	112/49.2
C280	4030006860	S.CER C1608 JB 1H 102K-T	T	101/66.7
C281	4030007130	S.CER C1608 CH 1H 101J-T	T	112/47.7
C282	4030006960	S.CER C1608 CH 1H 050C-T	T	111.2/58.5
C283	4030006980	S.CER C1608 CH 1H 070D-T	T	110.7/61.2
C284	4550006250	S.TAN TEESVA 1A 106M8R	T	111.5/71.5
C285	4030006860	S.CER C1608 JB 1H 102K-T	T	114.7/81.2
C286	4030011600	S.CER C1608 JB 1E 104K-T	T	115.5/72.7
C287	4030006860	S.CER C1608 JB 1H 102K-T	T	91.2/88.1
C288	4030006860	S.CER C1608 JB 1H 102K-T	T	117/72.7
C289	4030008630	S.CER C1608 JF 1H 104Z-T	T	92.5/88.1
C290	4030006860	S.CER C1608 JB 1H 102K-T	T	98.5/90.1
C291	4030008630	S.CER C1608 JF 1H 104Z-T	T	100/90.1
C292	4030006860	S.CER C1608 JB 1H 102K-T	T	120/72.7
C293	4030011070	S.CER GRM31M2C2H5R0CY21L	T	115.6/97.5
C294	4030006860	S.CER C1608 JB 1H 102K-T	T	106.8/90.1
C295	4030006860	S.CER C1608 JB 1H 102K-T	T	102/29.6
C296	4030008920	S.CER C1608 JB 1H 473K-T	T	105.5/75.5
C297	4030006860	S.CER C1608 JB 1H 102K-T	T	105.2/95
C298	4030008630	S.CER C1608 JF 1H 104Z-T	T	108.2/90.1
C299	4030011020	S.CER GRM31M4C2H1R0CY21L	T	107.5/98.7
C300	4030006940	S.CER C1608 CH 1H 030C-T	T	108.2/95
C301	4030011090	S.CER GRM31M2C2H7R0DV01L	T	110.6/98.7
C302	4030006900	S.CER C1608 JB 1H 103K-T	T	107.2/80.5
C303	4030006860	S.CER C1608 JB 1H 102K-T	T	117.4/90
C304	4030011600	S.CER C1608 JB 1E 104K-T	T	103/79.2
C305	4030006860	S.CER C1608 JB 1H 102K-T	T	100.2/96
C306	4030006860	S.CER C1608 JB 1H 102K-T	T	99.7/102.2
C307	4030008630	S.CER C1608 JF 1H 104Z-T	T	116.1/90
C308	4030006860	S.CER C1608 JB 1H 102K-T	T	101.7/79.2
C309	4030006860	S.CER C1608 JB 1H 102K-T	T	100.7/76.2
C310	4030006850	S.CER C1608 JB 1H 471K-T	T	114.8/90
C311	4030011020	S.CER GRM31M4C2H1R0CY21L	T	103.1/103.7
C312	4030006940	S.CER C1608 CH 1H 030C-T	T	99.7/105.2
C313	4030011080	S.CER GRM31M2C2H6R0DV01L	T	103.1/106.2
C314	4030017190	S.CER GRM31AR32J471KW01D	T	112.5/109.3
C315	4030011060	S.CER GRM31M2C2H4R0CY21L	T	112.5/113.1

**[MAIN-T UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
C316	4030011150	S.CER GRM31M2C2H130JV01L	T	112.5/118.1
C317	4030011110	S.CER GRM31M2C2H9R0DV01L	T	112.5/122.5
C318	4030011060	S.CER GRM31M2C2H4R0CY21L	T	112.5/125
C319	4030009530	S.CER C1608 CH 1H 030B-T	T	64.5/45.5
C320	4030009910	S.CER C1608 CH 1H 040B-T	T	63.7/41
C322	4030009530	S.CER C1608 CH 1H 030B-T	T	37.5/45.3
C323	4550000460	S.TAN TEESVA 1C 105M8R	B	45.2/49.5
C324	4030006900	S.CER C1608 JB 1H 103K-T	B	41.2/20.2
C325	4030006900	S.CER C1608 JB 1H 103K-T	B	42.2/43.2
C326	4030007010	S.CER C1608 CH 1H 100D-T	T	55.2/31
C327	4030006860	S.CER C1608 JB 1H 102K-T	T	48.7/34.5
C328	4030007000	S.CER C1608 CH 1H 090D-T	T	49/53
C329	4030009530	S.CER C1608 CH 1H 030B-T	T	54.7/46.6
C330	4030009530	S.CER C1608 CH 1H 030B-T	T	39/21.8
C331	4030009910	S.CER C1608 CH 1H 040B-T	T	99.3/54.2
C333	4030006860	S.CER C1608 JB 1H 102K-T	T	85.8/38.3
J1	6510009351	CNR B2B-ZR (LF) (SN)		
J2	6510021720	S.CNR 30FLT-SM1-TB	T	23/107.2
J3	6510021720	S.CNR 30FLT-SM1-TB	T	45/107.2
J4	6510018450	CNR TMP-S01X-B1		
W1	8900004880	CBL OPC-465		
EP1	6910013310	S.BEA MMZ1608D121B	T	33.7/16.7
EP2	6910013310	S.BEA MMZ1608D121B	T	23.2/50.5
EP200	6910013310	S.BEA MMZ1608D121B	T	83.5/39
EP201	6910013310	S.BEA MMZ1608D121B	T	82.2/65.7
EP202	6910013310	S.BEA MMZ1608D121B	T	90.2/80.7
EP203	6910013310	S.BEA MMZ1608D121B	T	111.2/45.7
EP204	6910013310	S.BEA MMZ1608D121B	T	118.5/72.7

**[FRONT UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
D1	1790001711	S.DIO NNC5.6C-T1-A	T	36.9/71.8
D2	1790001711	S.DIO NNC5.6C-T1-A	T	32.9/71.8
D3	1790001711	S.DIO NNC5.6C-T1-A	T	24.9/71.8
D4	1790001711	S.DIO NNC5.6C-T1-A	T	20.9/71.8
D5	1790001711	S.DIO NNC5.6C-T1-A	T	16.9/71.7
D6	1790001711	S.DIO NNC5.6C-T1-A	T	12.9/71.8
D7	1790000700	DIO DSA3A1		
D8	1790001711	S.DIO NNC5.6C-T1-A	T	28.9/71.8
R1	7030003300	S.RES ERJ3GEYJ 680 V (68)	T	36/76.4
R2	7030003300	S.RES ERJ3GEYJ 680 V (68)	T	32/76.4
R3	7030003300	S.RES ERJ3GEYJ 680 V (68)	T	24/76.4
R4	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	20/76.4
R5	7030003320	S.RES ERJ3GEYJ 101 V (100)	T	16/76.4
R6	7030003300	S.RES ERJ3GEYJ 680 V (68)	T	12/76.4
R7	7030011030	S.RES ERJ1TYJ 270U (27)	T	35.3/21.3
R8	7030003340	S.RES ERJ3GEYJ 151 V (150)	T	28/76.4

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)  
S.=Surface mount

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**[REAR UNIT]**

REF NO.	ORDER NO.	DESCRIPTION	M.	H/V LOCATION
C7	4510008800	S.ELE EEE1EA100SR	T	40.8/26.6
J1	6510018921	S.CNR B8B-PH-SM4-TB (LF) (SN)	T	23.9/43
J2	6510016171	CNR 52018-8836		
J3	6510023261	S.CNR B6B-PH-SM4-TB (LF) (SN)	T	25.9/58.5
J4	6510011591	CNR B2P-VH (LF) (SN)		
J5	6510011461	CNR B6P-VH (LF) (SN)		
J6	6510018961	S.CNR B2B-PH-SM4-TB (LF) (SN)	T	39.8/36.3

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)

S.=Surface mount

## SECTION 5 SEMICONDUCTOR INFORMATION

### • TRANSISTORS AND FET'S

2SA1362 GR (Symbol: AEG)	2SA1586 GR (Symbol: SG)	2SB798 T2 DK (Symbol: DK)	2SB934 P (Symbol: None)	2SC4081 T106 S (Symbol: BS)
2SC4215 O (Symbol: QO)	2SC4226 T1 R25 (Symbol: R25)	2SC4684 (Symbol: 2SC4684)	2SC5107 O (Symbol: MFO)	2SC5195 (Symbol: 88)
2SC5454 R54 (Symbol: R54)	2SD1619 T TD (Symbol: DB)	2SD1801 S TL (Symbol: CE)	2SD2216J (Symbol: Y)	2SK2854 (Symbol: UP)
2SK2855 (Symbol: UT)	3SK241 (Symbol: DU)	DTA114EUA T106 (Symbol: 14)	DTA143TUA (Symbol: 93)	DTA144EUA T106 (Symbol: 16)
DTC143ZUA (Symbol: 123)	DTC144EUA T106 (Symbol: 26)	NE34018-T1 64 (Symbol: V64)	XP1214 (Symbol: 9H)	XP4315 (Symbol: CB)

### • DIODES

1SS355 (Symbol: A)	1SS364 (Symbol: BF)	1SS372 (Symbol: N9)	1SV239 (Symbol: TC)	1SV282 (Symbol: TD)
1SV307 (Symbol: TX)	1SV308 (Symbol: TX)	DSA3A1 (Color: Green)	HSU88TRF (Symbol: 9)	MA2S077 (Symbol: S)
MA2S728 (Symbol: B)	MA8030 H (Symbol: 3^0)	MA8033 L (Symbol: 3_3)	MA8062 M (Symbol: 6-2)	MA8082 M (Symbol: 8-2)
MA8091 M (Symbol: 9-1)	NNCD5.6C-T1 (Symbol: NNCD5.6)	SB07-03C (Symbol: J)		

## SECTION 6 MECHANICAL PARTS

### [CASE]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
MF1	2710000750	FBA08A12LZ (RIB)	1
W1	8900013140	OPC-1323 (2731 POWER-SW CABLE)	1
W2	8900013210	OPC-1307 (2731 DC CABLE)	1
W3	8900013240	OPC-1373 (2731 FAN CABLE)	1
W4	8900013170	OPC-1306 (2731 TRX-ANT CABLE)	1
W5	8900013170	OPC-1306 (2731 TRX-ANT CABLE)	1
EP1	6910008330	G80-18	1
MP1	8010019581	2732 CHASSIS-1	1
MP2	8930062871	2731 R-PLATE-1	1
MP3	8930062861	2731 L-PLATE-1	1
MP4	8110008171	2731 COVER-1	1
MP5	8210023000	2732 PANEL (B)	1
MP6	8930062851	2731 M-PLATE-1	2
MP7	8930062851	2731 M-PLATE-1	2
MP8	8930062841	2731 FAN HOLDER-1	2
MP9	8930063090	BH-60S	1
MP10	8850002040	Z-8S	4
MP12	8930048350	2146 LENS	1
MP13	8950003170	Nylon clip SL-8N	1
MP14	8810006470	setscrew (C) 4x12 SUS	4
MP15	8810003361	setscrew (C) 3x6 ZC3	4
MP16	8810003361	setscrew (C) 3x6 ZC3	4
MP17	8810003361	setscrew (C) 3x6 ZC3	4
MP18	8810003361	setscrew (C) 3x6 ZC3	4
MP20	8810003361	setscrew (C) 3x6 ZC3	1
MP21	8810002950	binding screw M3x6 SUS	12
MP22	8810002950	binding screw M3x6 SUS	2
MP23	8810002950	binding screw M3x6 SUS	1
MP24	8810010131	setscrew (C) 3x35 ZC3	4
MP25	8810003391	setscrew (C) 4x8 ZC3	4
MP26	8810003391	setscrew (C) 4x8 ZC3	4
MP27	8830000111	Nut M4 ZC3	1
MP28	8850000140	flat washer M4 BS NI	1
MP29	8850000130	flat washer M3 BS NI 3x8x0.5	1
MP30	8810002950	binding screw M3x6 SUS	2

### [FRONT UNIT]

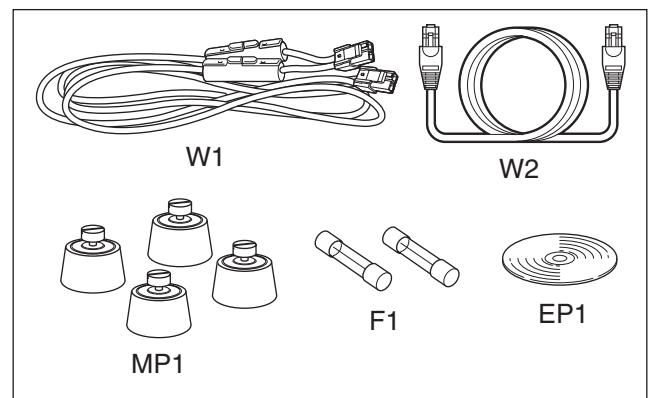
REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6450002101	CMS140-016010	1
J2	6450002101	CMS140-016010	1
J3	6510020251	B9B-PH-SM4-TB (LF) (SN)	1
J4	6510022311	B5B-PH-SM4-TB (LF) (SN)	1
DS1	5040003070	MPG4371F	1
S1	2220000631	MFS201N-16-Z	1

### [REAR UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J2	6510016171	52018-8836	1

### [ACCESSORIES]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
F1	5210000071	FGB 10A PBF	2
W1	8900013190	OPC-1309 (2731 DC-IN CABLE)	1
W2	8900010551	OPC-1069A	1
EP1	7800000330	Utility CD	1
MP1	8930057680	Rubber leg (O)	4



### Screw abbreviations

BIH: Binding head  
 SUS: Stainless NI: Nickel  
 BS: Brass

### [CHASSIS-T PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
IC204	1150002042	RA30H1317M-121	1
J1	6510004910	NR-DSE-01	1
W1	8900010890	OPC-1115	1
W2	8900010890	OPC-1115	1
P1	5610000380	TMP-K01X-A1	1
P2	5610000380	TMP-K01X-A1	1
MF1	2710000590	MF40D-12H-001	*
W1	8900010890	OPC-1115	1
W2	8900010890	OPC-1115	1
W3	9025900540	62/99/270/C31/C31	1
W4	9086700300	08	1
MP1	8010019621	2506 CHASSIS (A)-2	1
MP2	8810008661	Screw BT B0 3x8 NI-ZC3 (BT)	2
MP3	8810008661	Screw BT B0 3x8 NI-ZC3 (BT)	2
MP4	8810008661	Screw BT B0 3x8 NI-ZC3 (BT)	7
MP5	8110006640	2047 COVER	1
MP6	8810008451	binding screw M4x8 ZK3	1
MP7	8810008661	Screw BT B0 3x8 NI-ZC3 (BT)	1
MP9	8110005751	1729 FAN COVER-1	1
MP10	8810009111	Screw M2.6x16 ZK3	4
MP11	8510012210	2047 MAIN SHIELD	2
MP12	8810007131	setscrew (H) 3x6 ZC3	4
MP13	8930001170	earth spring (A) (FX-294)	1

### [MAIN-T UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510009351	B2B-ZR (LF) (SN)	1
J2	6510021721	30FLT-SM2-TB (LF) (SN)	1
J3	6510021721	30FLT-SM2-TB (LF) (SN)	1
J4	6510018450	TMP-S01X-B1	1
W1	8900004880	OPC-465	1
MP1	8510011111	1922 VCO CASE-1	1
MP2	8510017220	2850 VCO COVER	1
MP3	8930056580	Spacer (AD)	4
MP4	8810007131	setscrew (H) 3x6 ZC3	4
MP5	8510002280	VCOshield plate (A) (FX-15)	1
MP6	8930014140	earth spring (D)	1
MP7	8510016420	2506 VCO CASE	1
MP8	8510016430	2506 VCO COVER	1

### [LOGIC-T UNIT]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510022711	30FLZ-SM2-TB (LF) (SN)	1
J2	6510022711	30FLZ-SM2-TB (LF) (SN)	1
J4	6510019271	52365-0671	1
J5	6510021431	S8B-ZR-SM4A-TF (LF) (SN)	1
J6	6510023861	S9B-ZR-SM4A-TF (LF) (SN)	1
W1	8900013161	OPC-1313A (2732 RX-CTRL CABLE)	1
MP1	8510014481	2506 CPU SHIELD-1	1
MP3	8510002280	VCO shield plate (A) (FX-15)	1
MP4	8510010460	1691 MAIN SHIELD PLATE	1
MP5	8510010460	1691 MAIN SHIELD PLATE	1

### [CHASSIS-R PARTS]

REF. NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510004910	NR-DSE-01	1
W1	8900010890	OPC-1115	1
W2	8900010890	OPC-1115	1
MP1	8010019621	2506 CHASSIS (A)-2	1
MP2	8810008661	screw BT B0 3x8 NI-ZC3 (BT)	2
MP3	8810008661	screw BT B0 3x8 NI-ZC3 (BT)	1
MP4	8810008661	screw BT B0 3x8 NI-ZC3 (BT)	7
MP5	8110006640	2047 COVER	1
MP6	8810008451	binding screw M4x8 ZK3	1
MP7	8510012210	2047 MAIN SHIELD	2
MP8	8810007131	setscrew (H) 3x6 ZC3	4

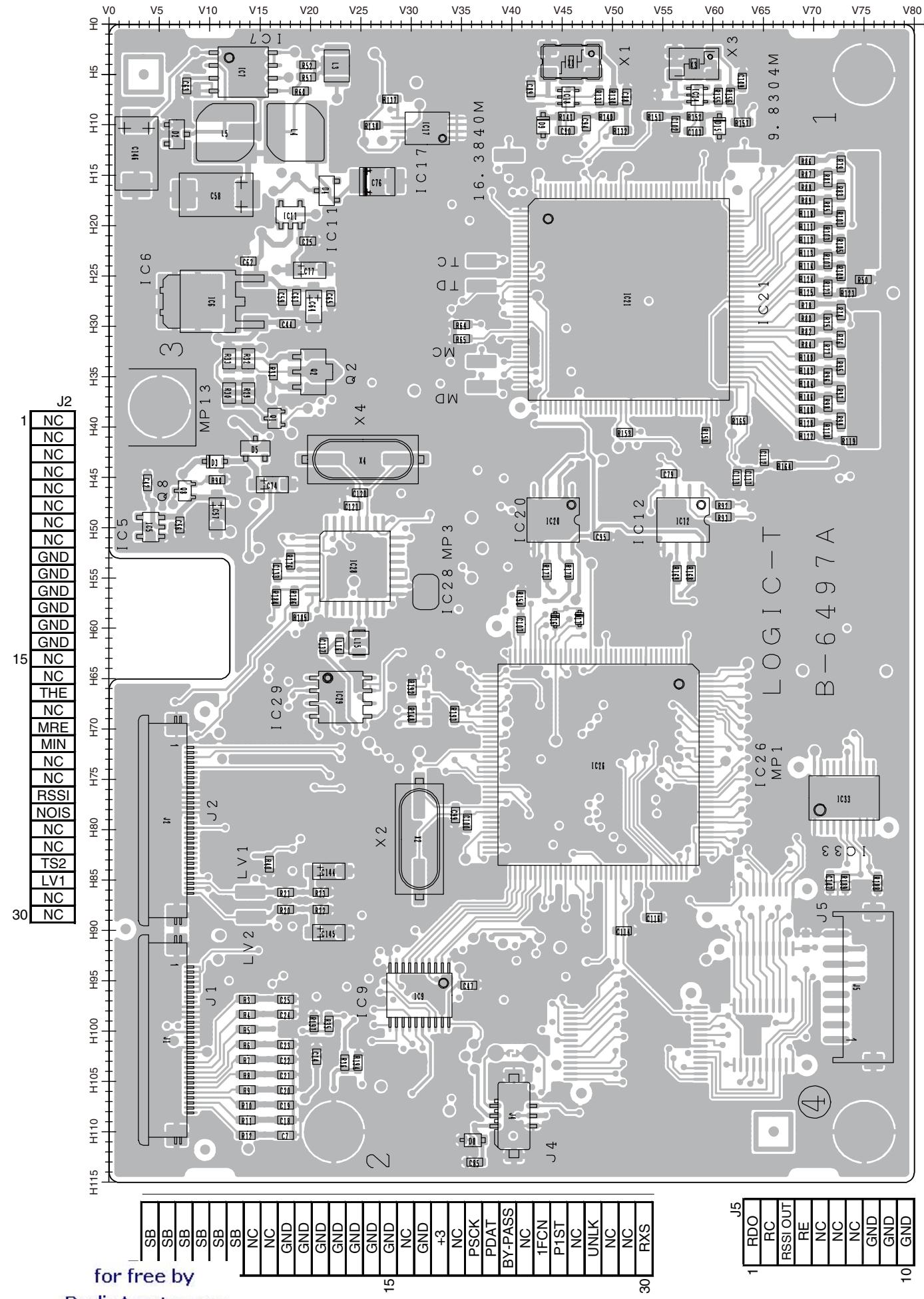
### [LOGIC-R UNIT]

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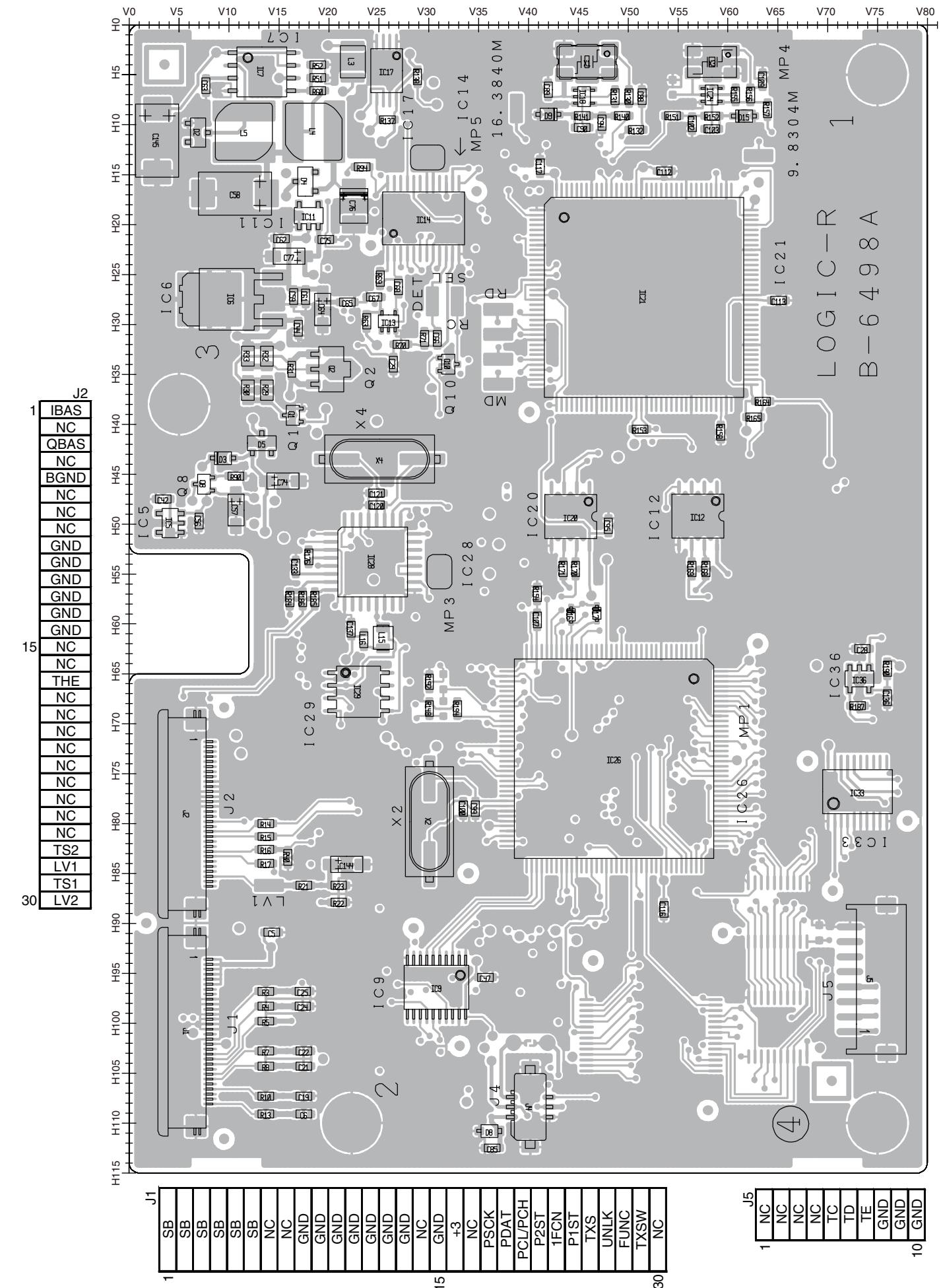
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## SECTION 7      BOARD LAYOUTS

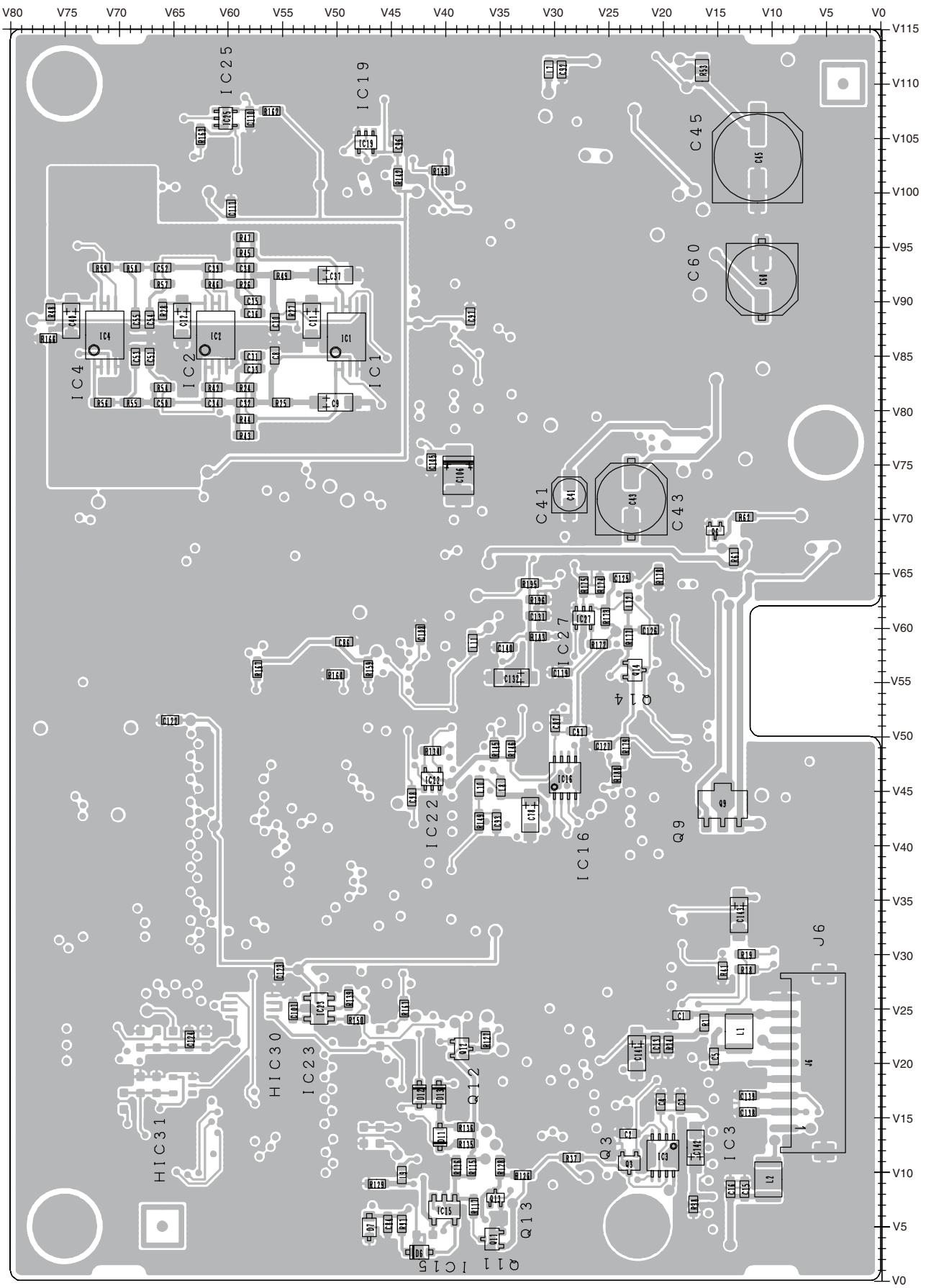
- **LOGIC-R BOARD (TOP VIEW)**



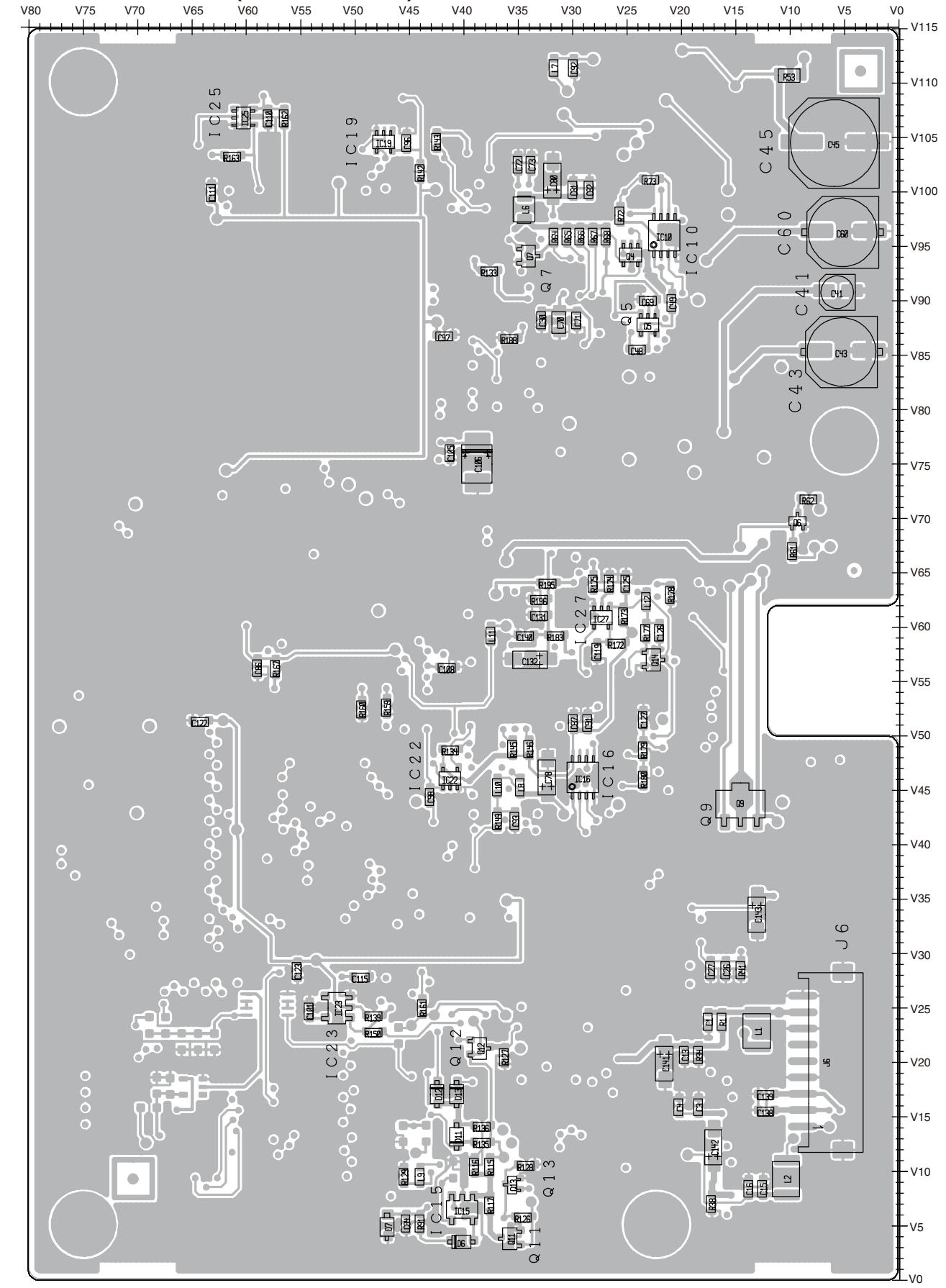
- **LOGIC-T BOARD (TOP VIEW)**



- **LOGIC-T BOARD (BOTTOM VIEW)**

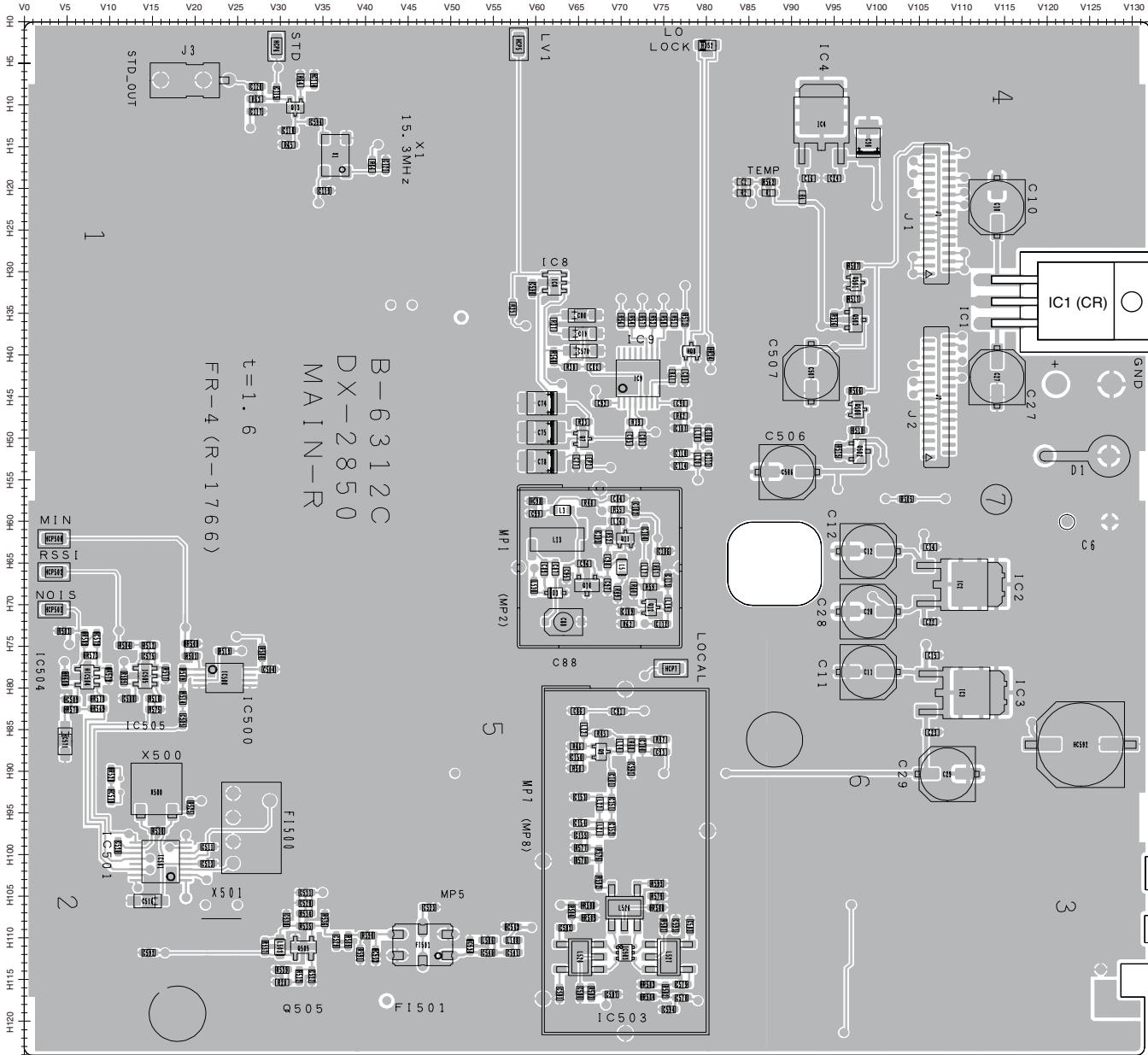


- **LOGIC-R BOARD (BOTTOM VIEW)**

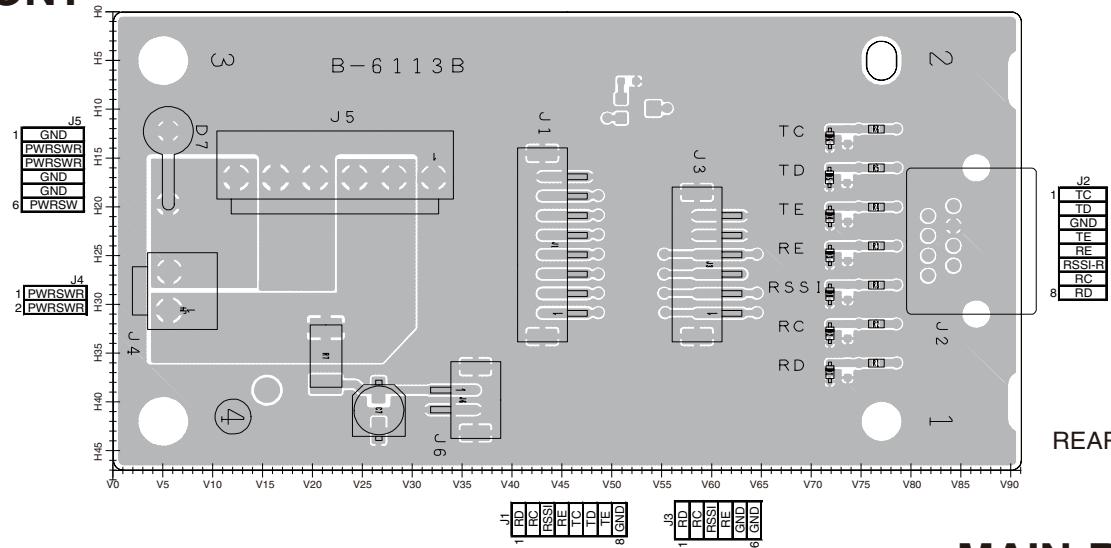


J6	1	USB5V
	2	USBDM
	3	USBDP
	4	GND
	5	NC
	6	NC
	7	GND
	8	SB
	9	GND
	10	GND

• MAIN-R



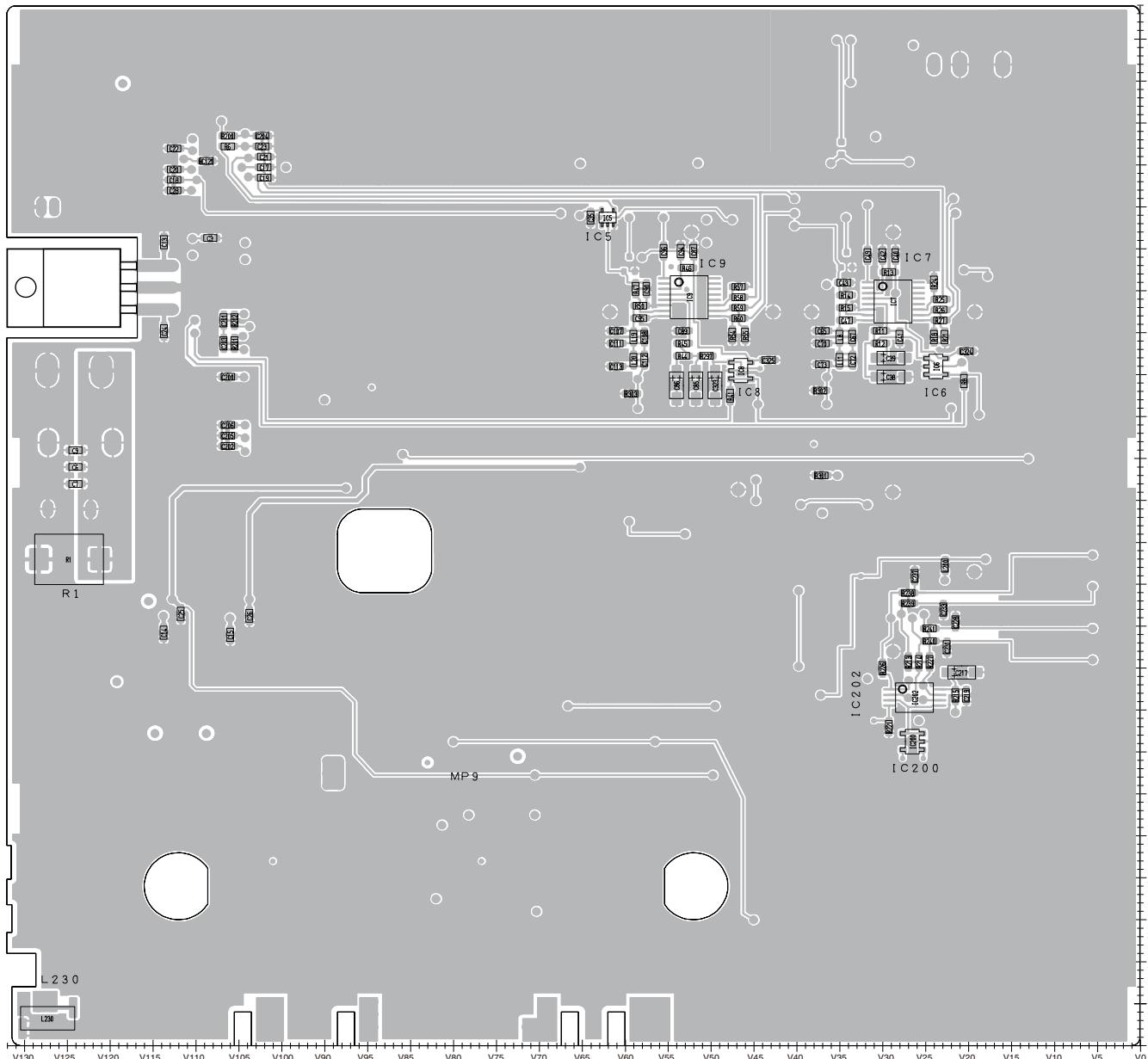
• FRONT



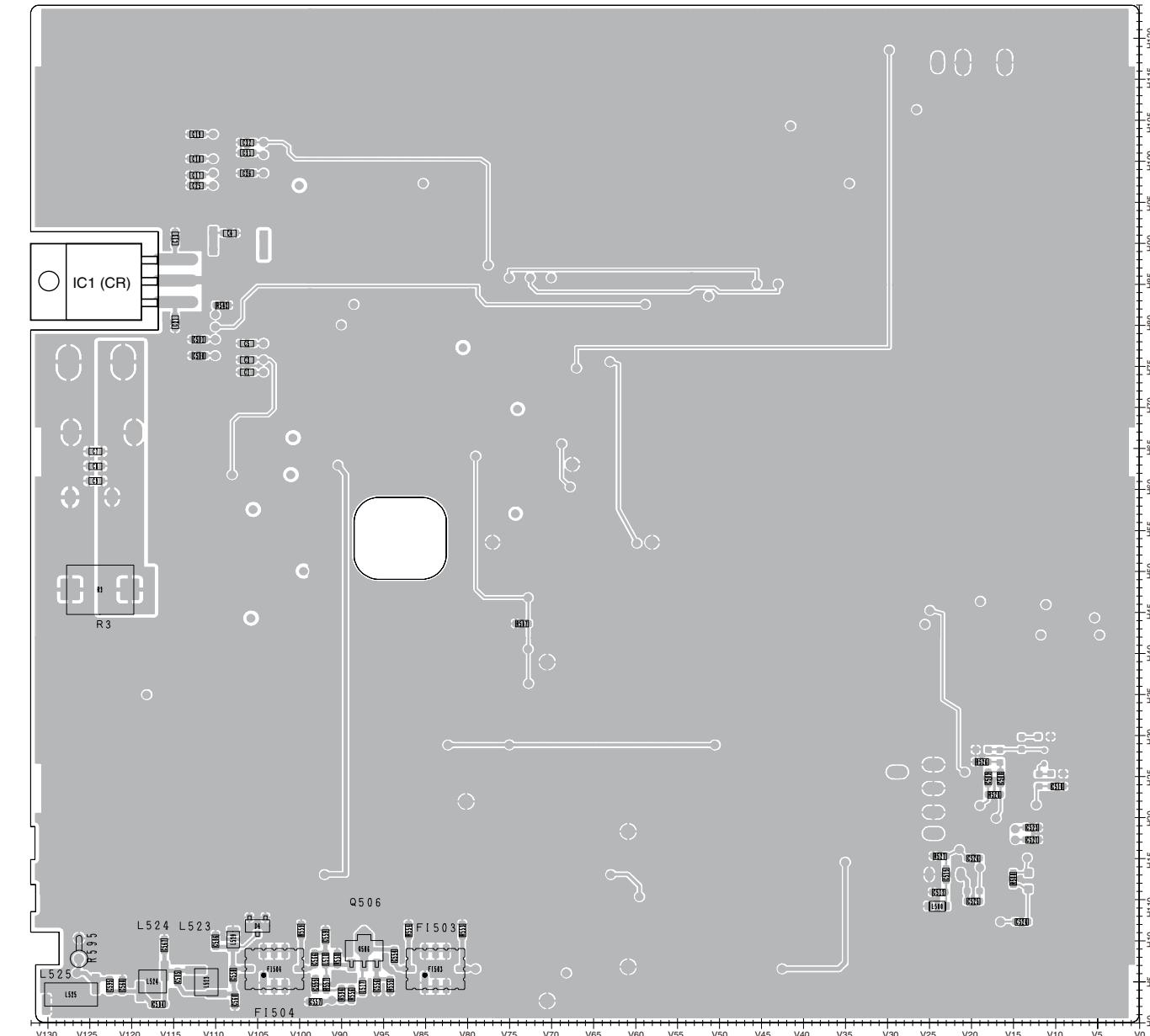
The combination of this side and the bottom side shows the unit layout in the same configuration as the actual P.C. Board.

REAR

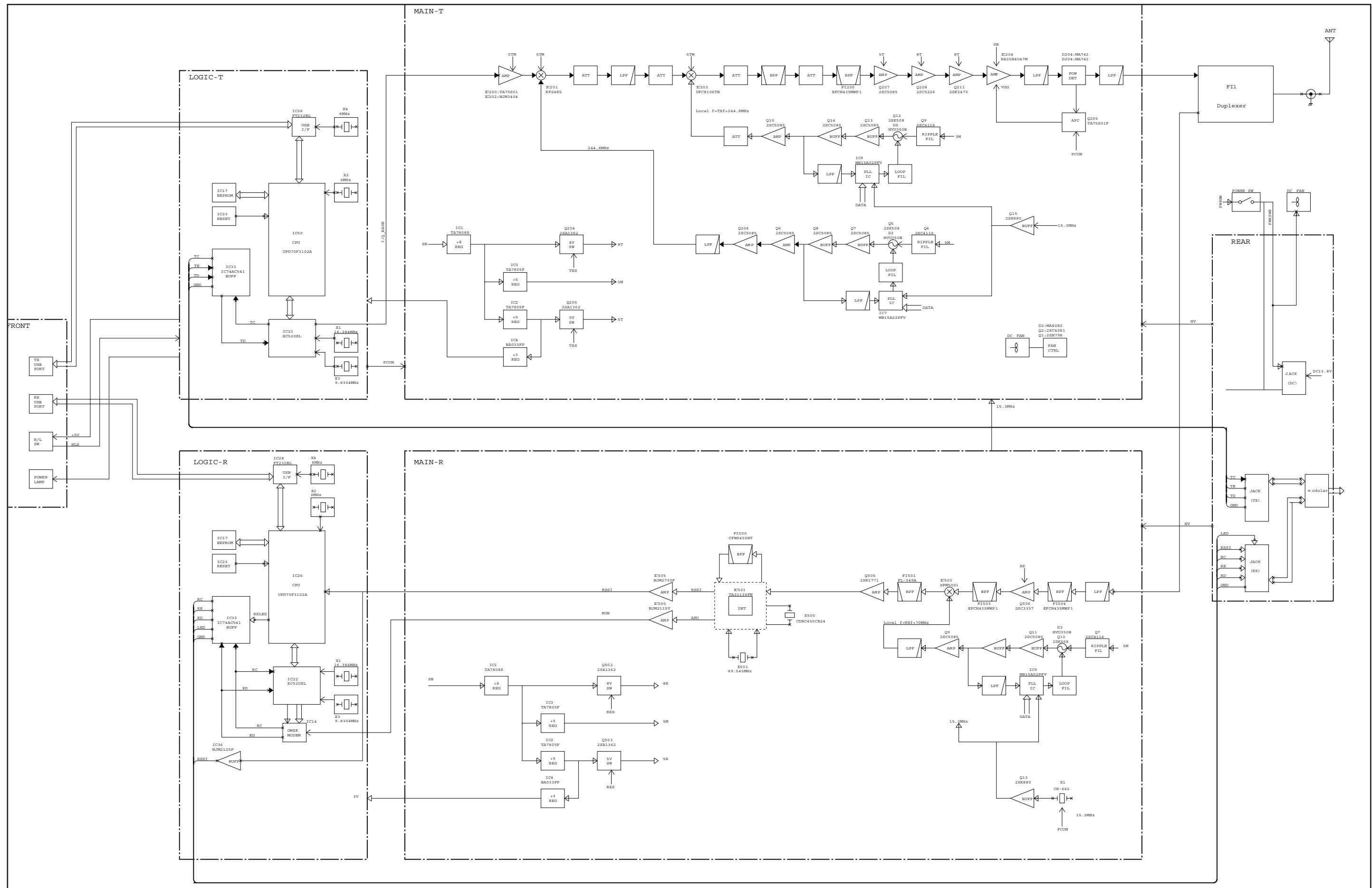
• MAIN-T



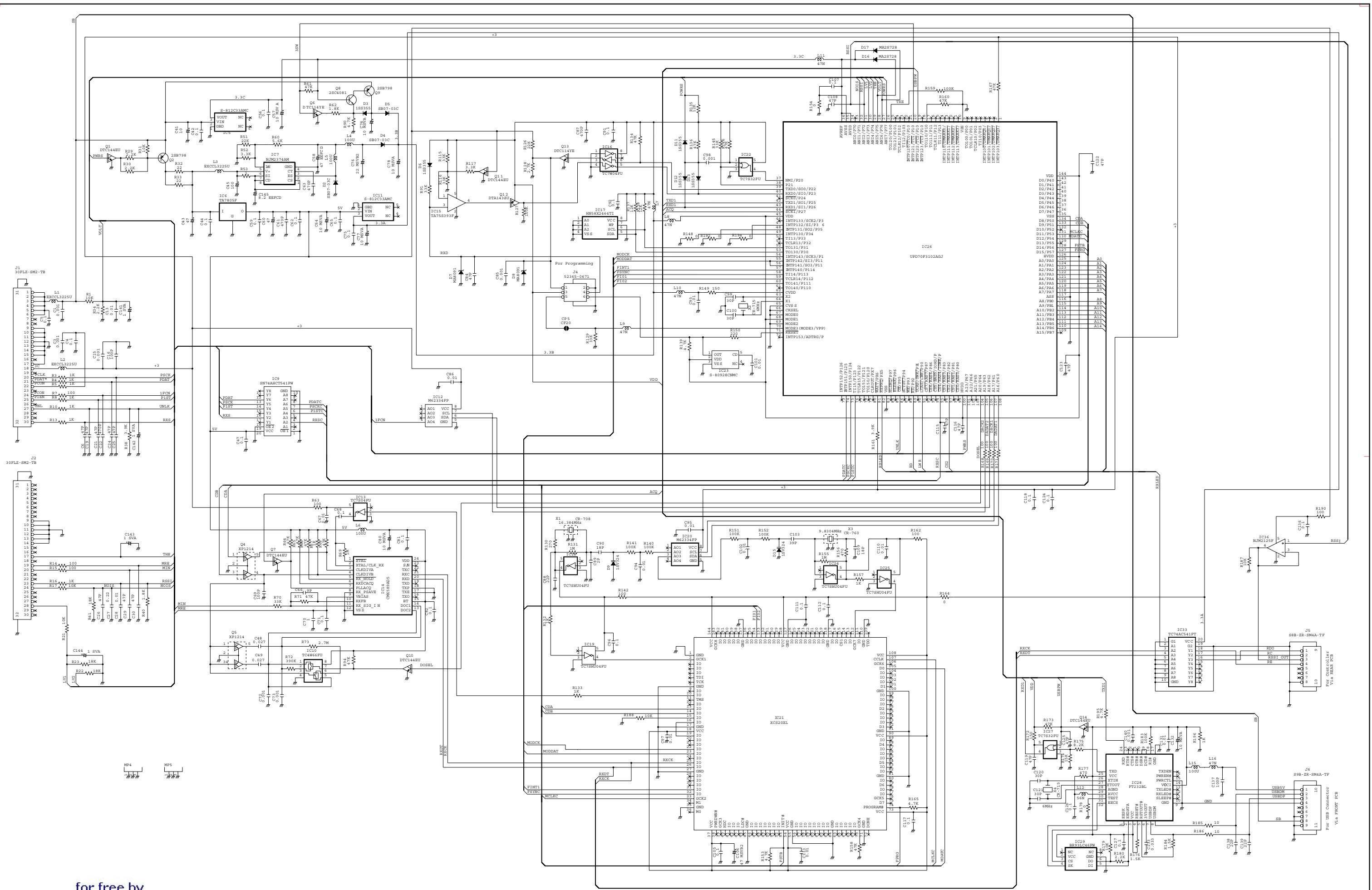
• MAIN-R

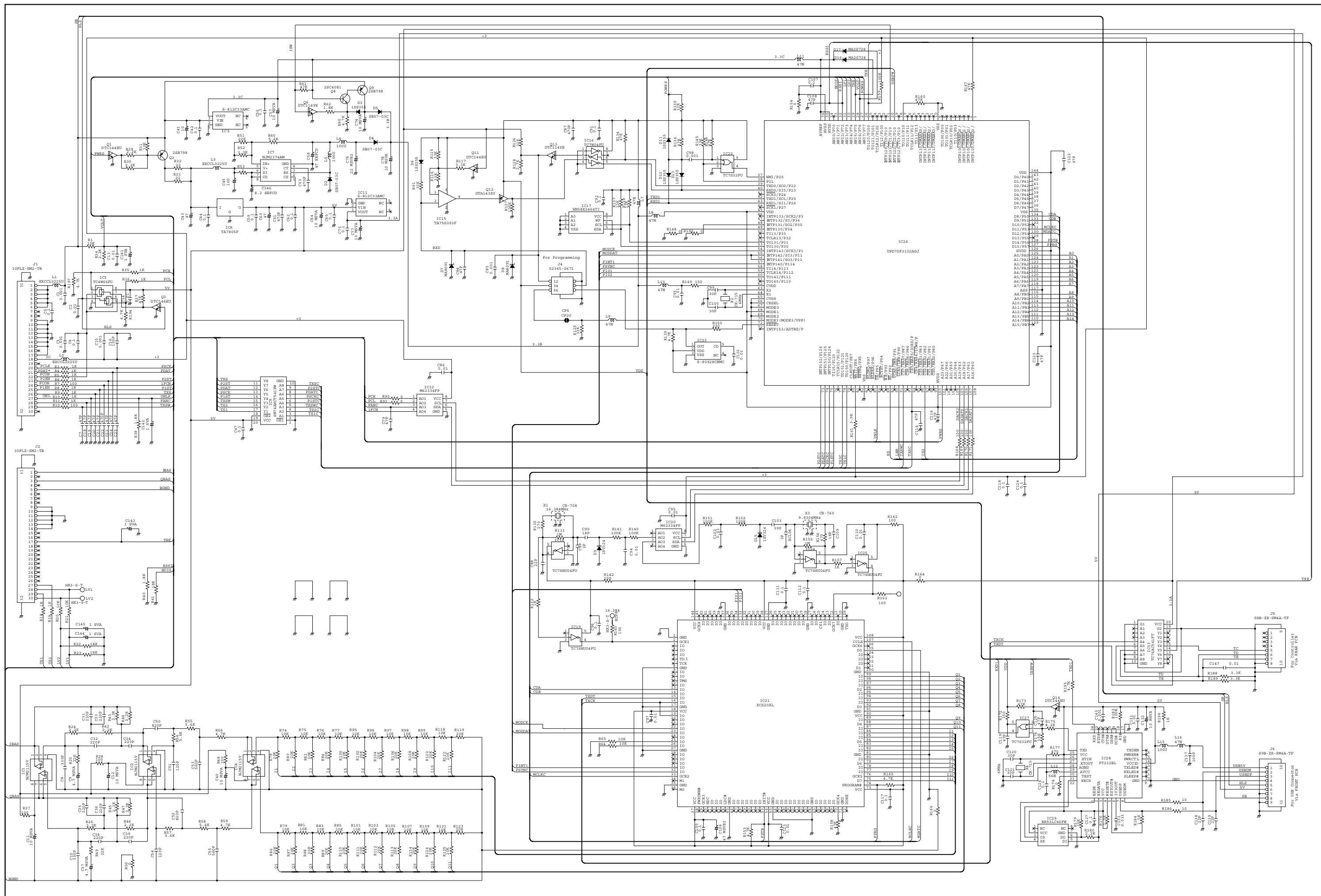


## SECTION 8 BLOCK DIAGRAM



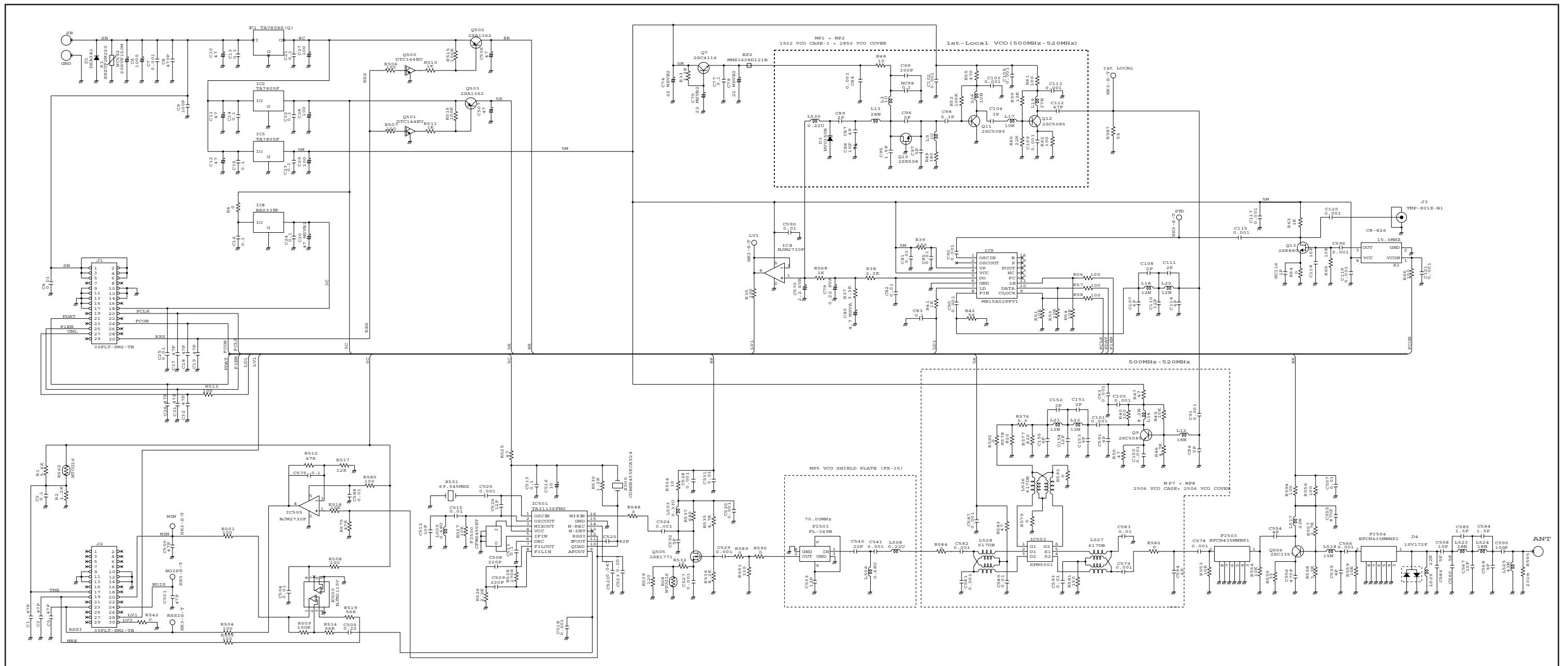
# SECTION 9      VOLTAGE DIAGRAM

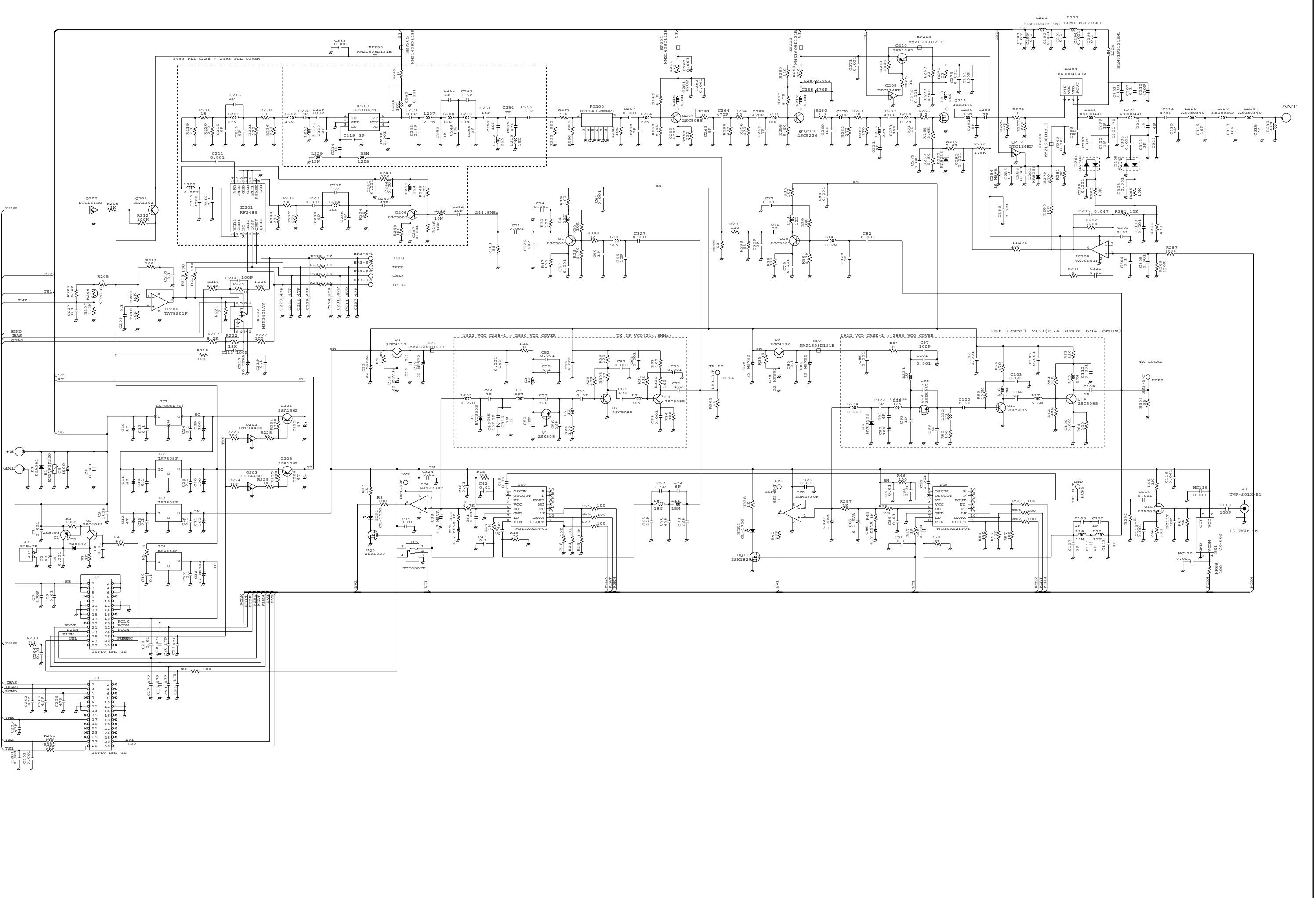




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